

SUPPLEMENTARY MATERIAL

**Nitrogen Oxide Inhibitory Trimeric and Dimeric Carbazole
Alkaloids from *Murraya microphylla***

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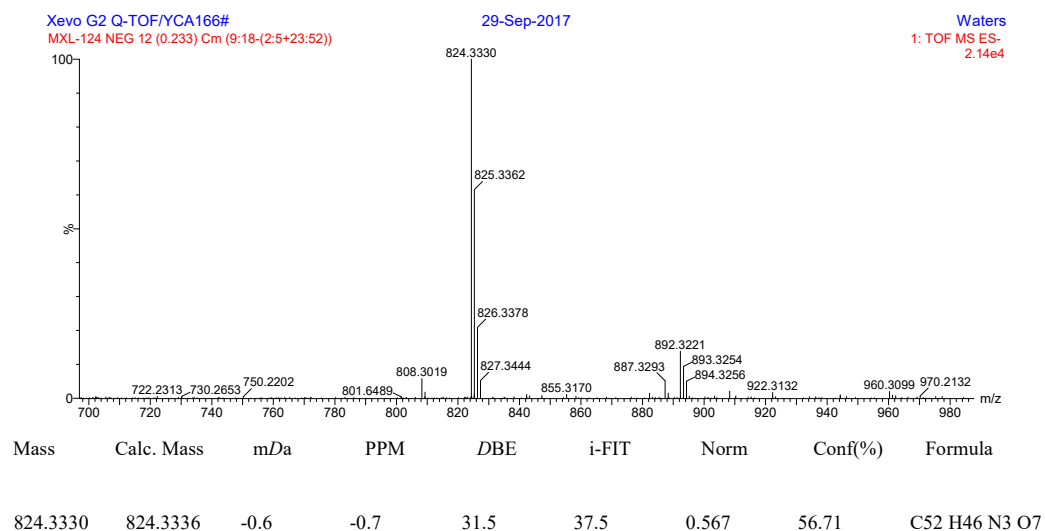


Figure S1 HRESIMS for compound **1**.

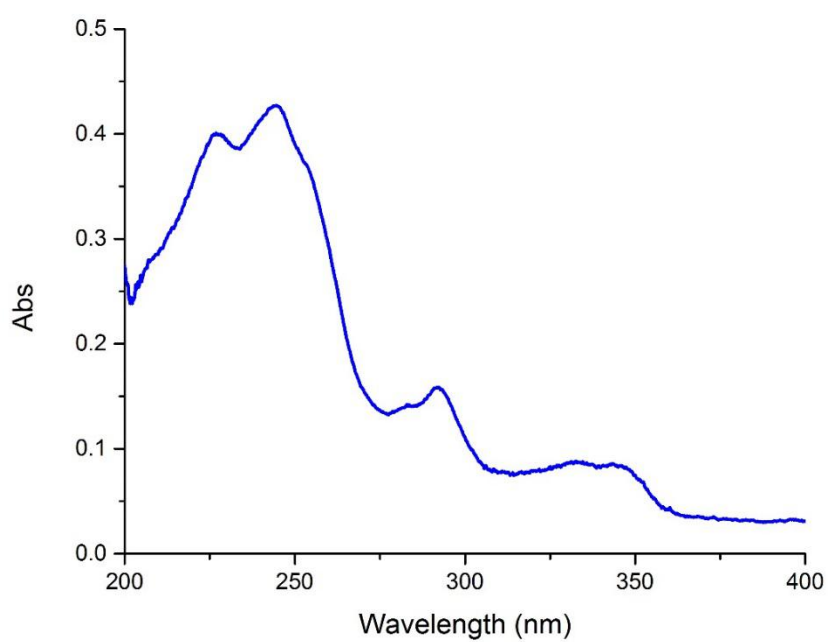


Figure S2 UV spectrum for compound **1**.

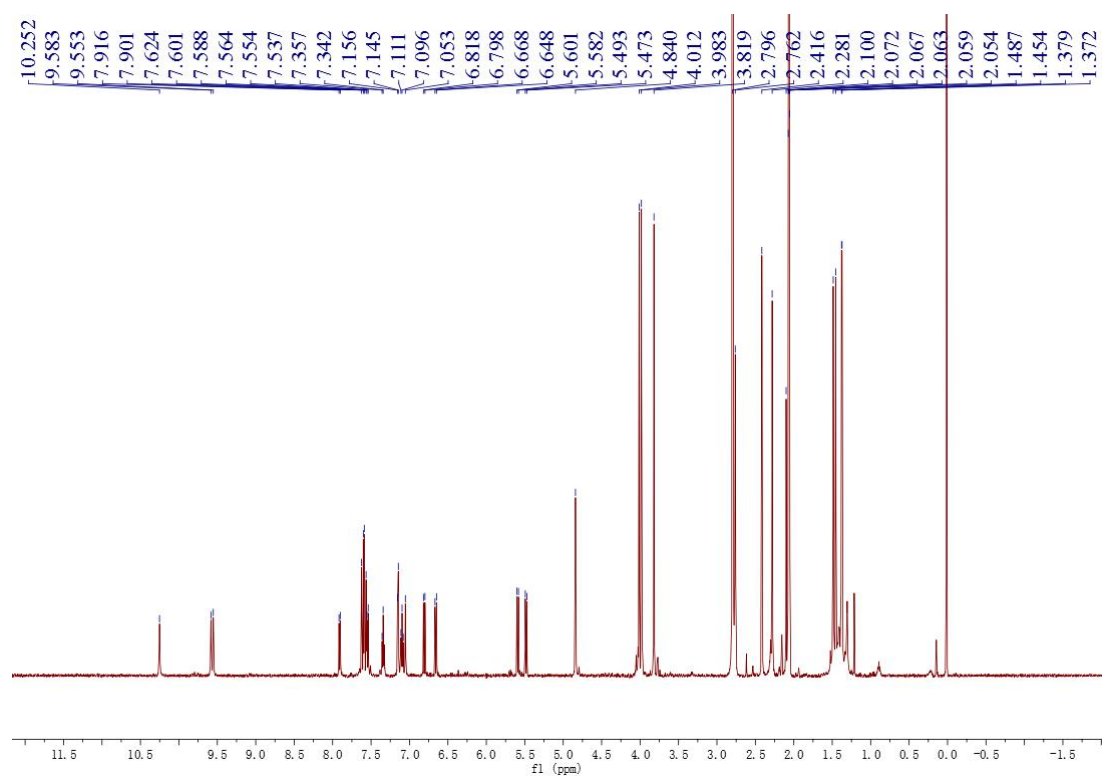


Figure S3 ¹H NMR spectrum (400 MHz, acetone-*d*₆) of compound **1**.

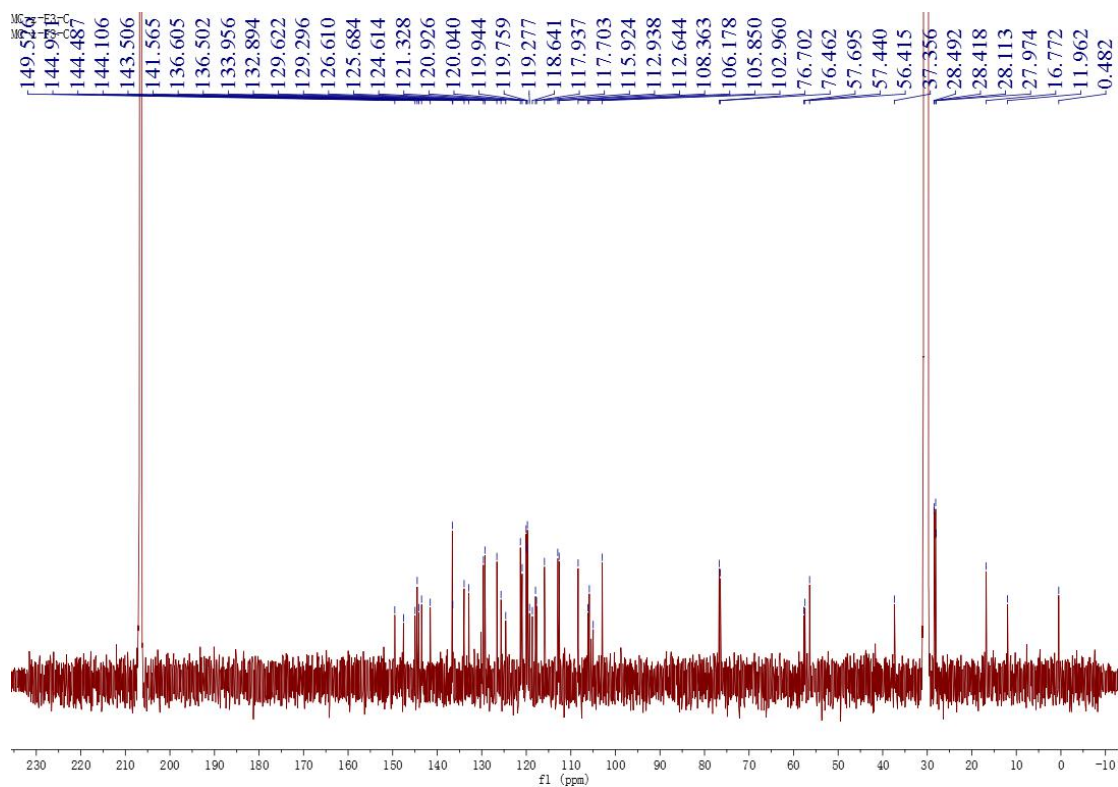


Figure S4 ¹³C NMR spectrum (100 MHz, acetone-*d*₆) of compound **1**.

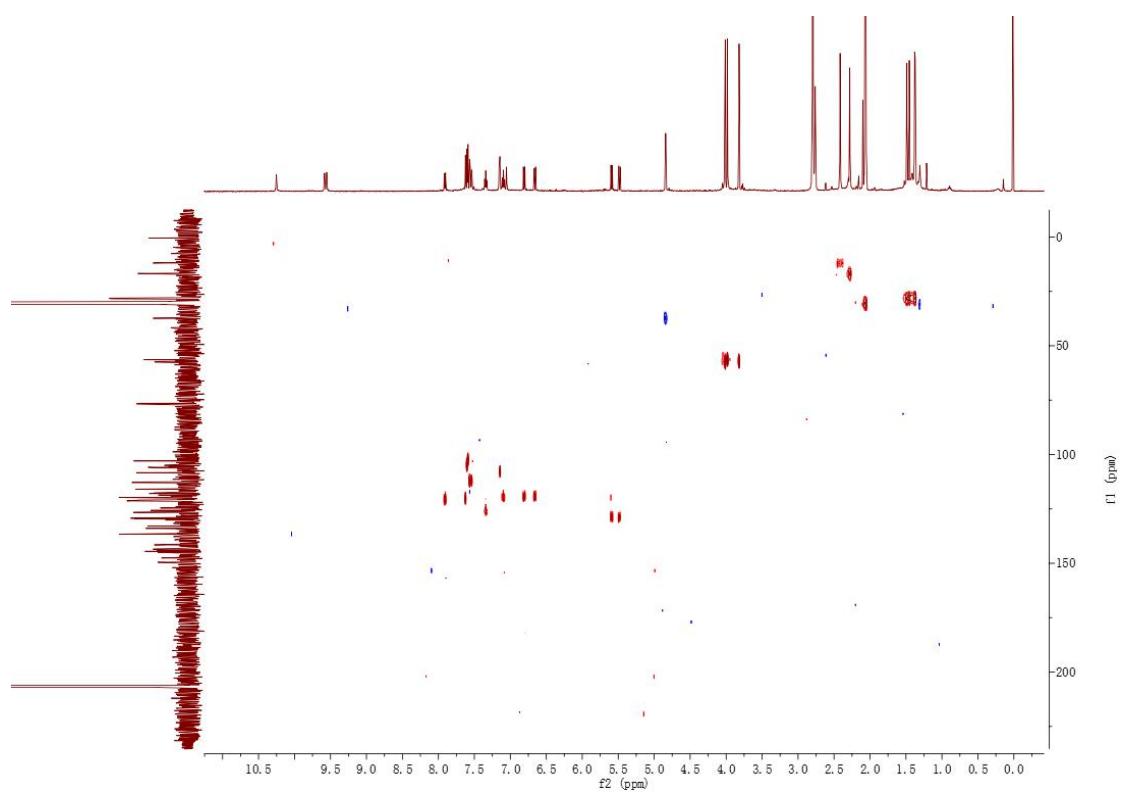


Figure S5 HSQC spectrum of compound **1**.

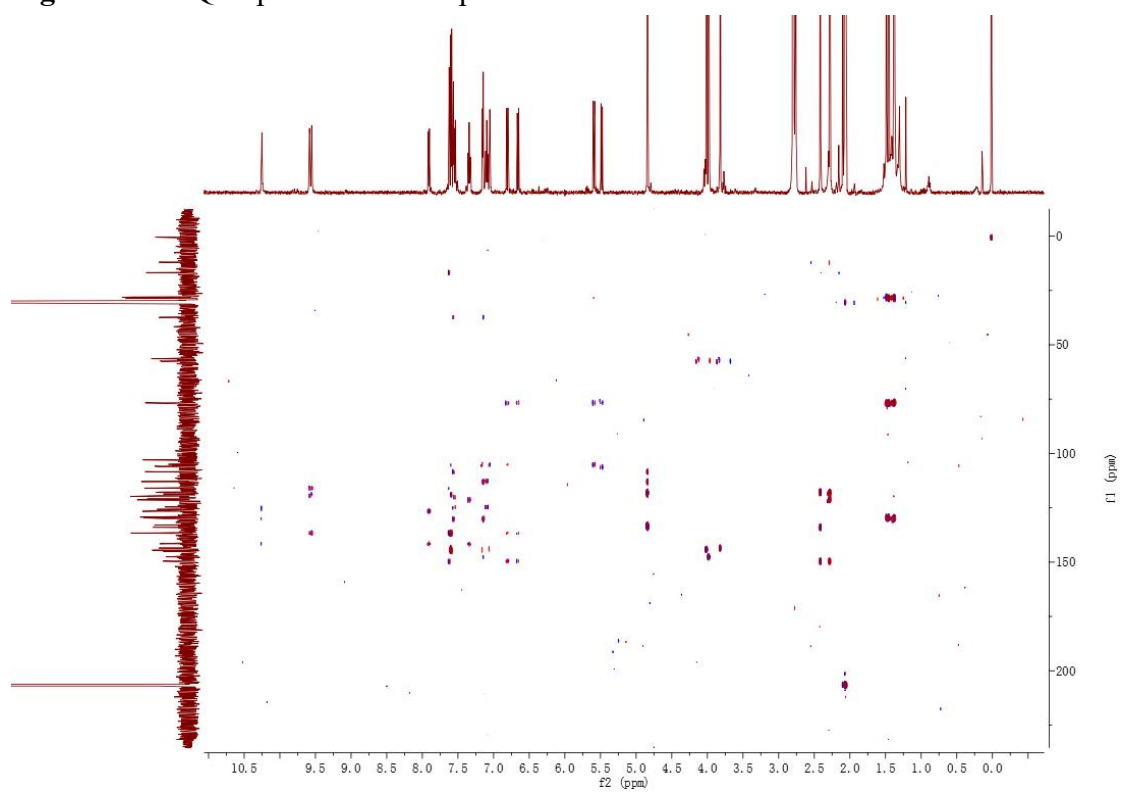


Figure S6 HMBC spectrum of compound **1**.

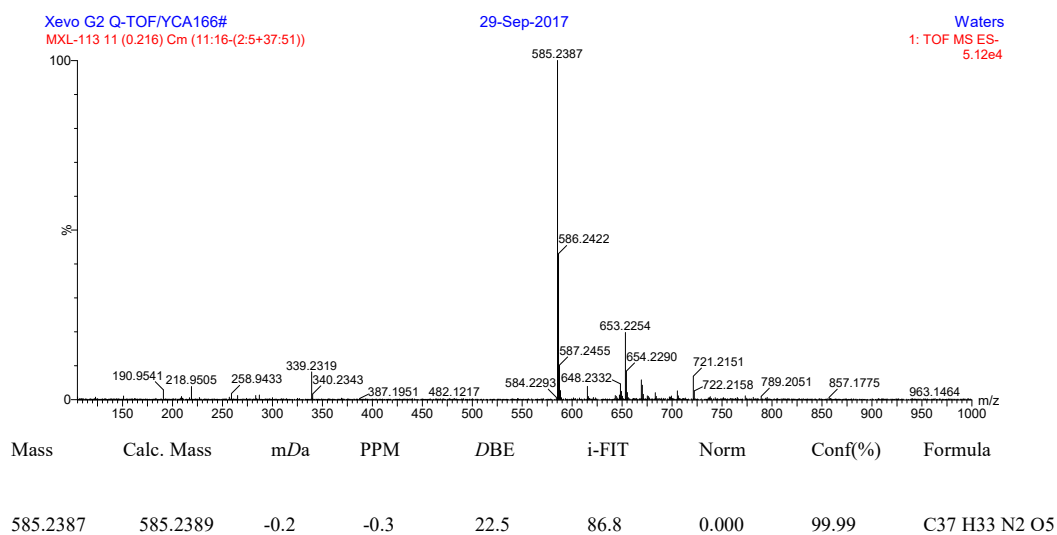


Figure S7 HRESIMS for compound **2**

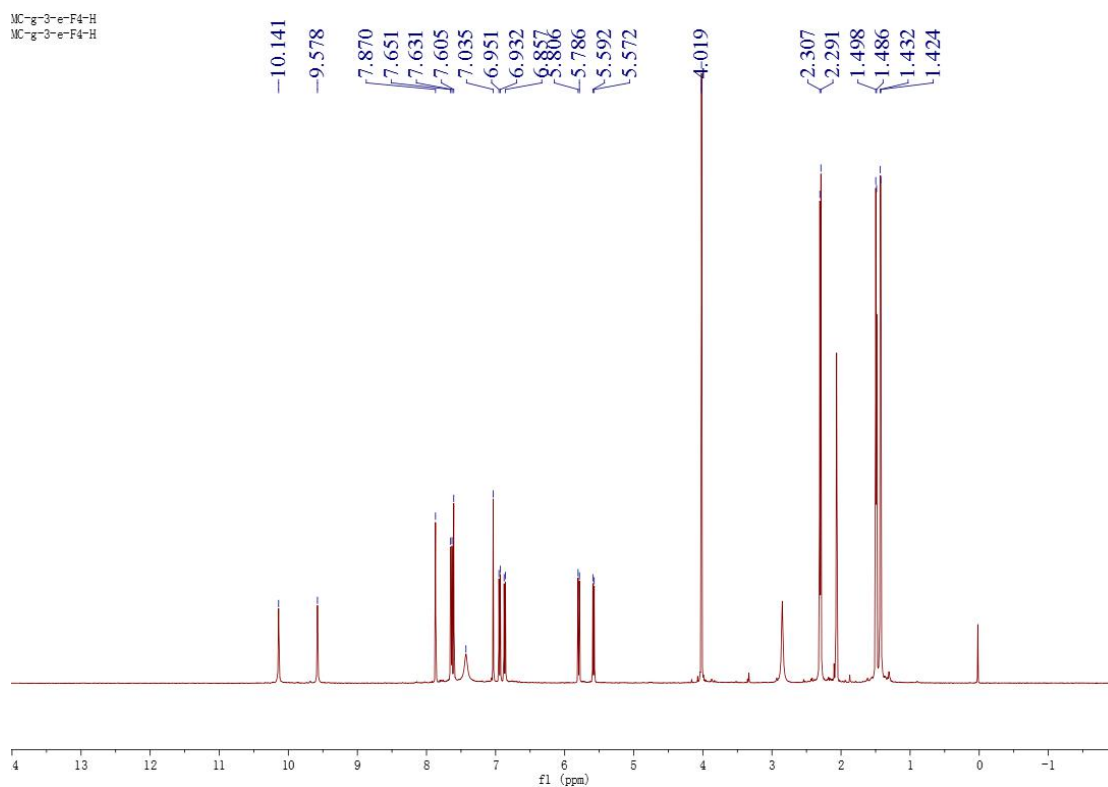


Figure S8 ^1H NMR spectrum (400 MHz, acetone- d_6) of compound **2**.

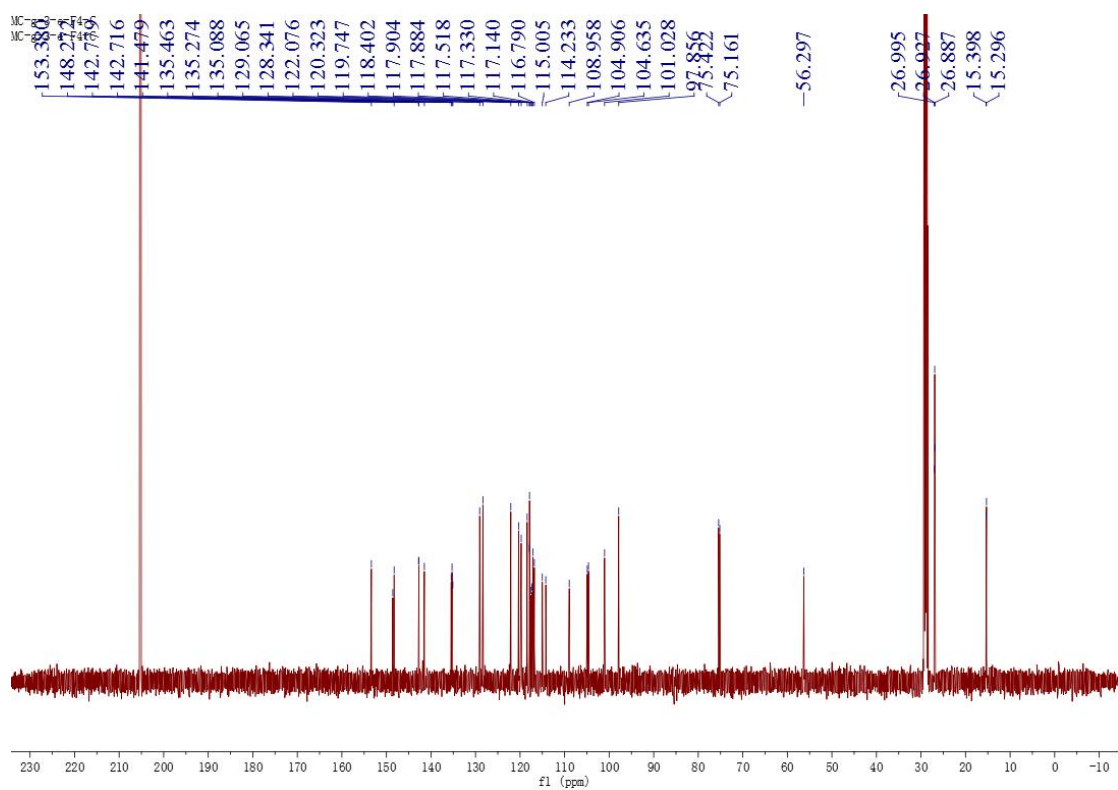


Figure S9 ^{13}C NMR spectrum (100 MHz, acetone- d_6) of compound **2**.

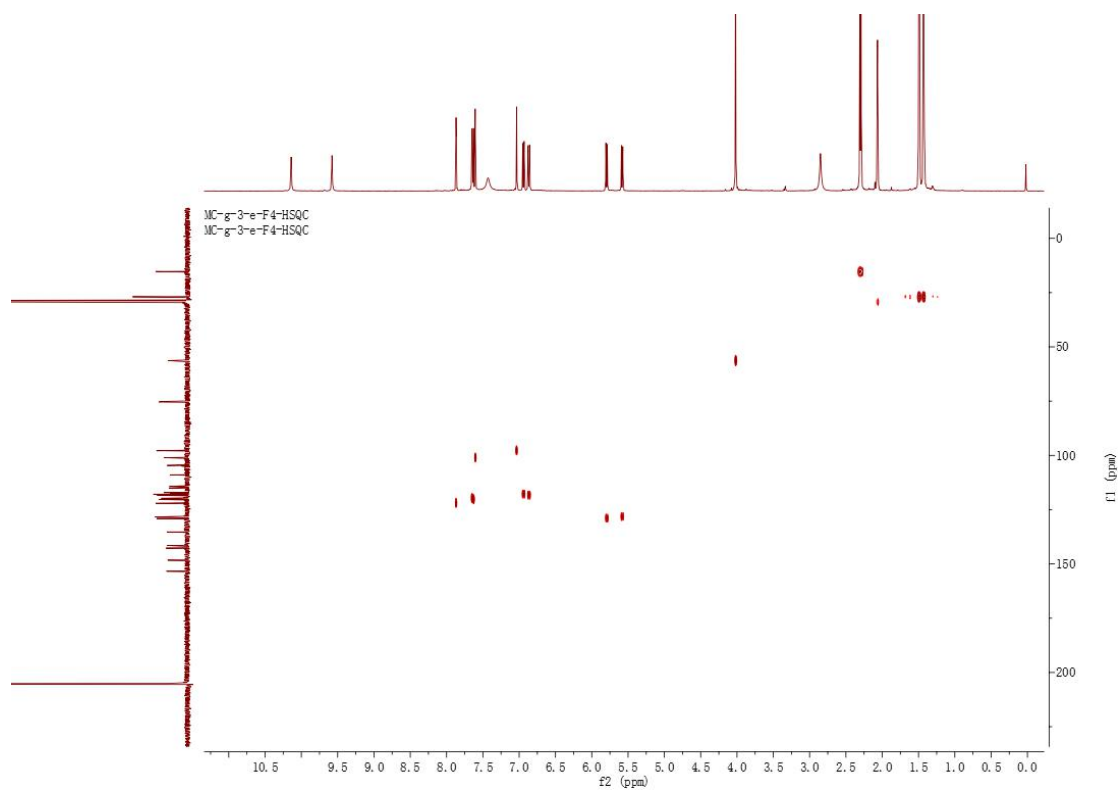


Figure S10 HSQC spectrum of compound **2**.

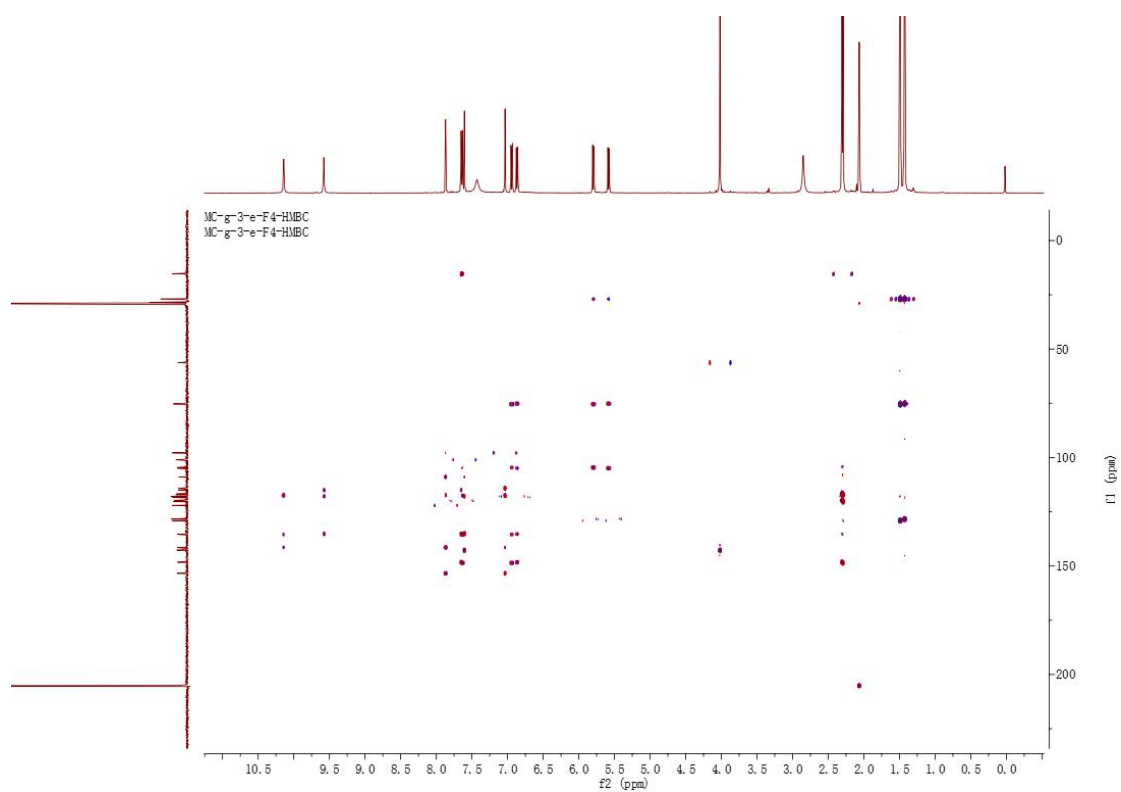


Figure S11 HMBC spectrum of compound **2**.

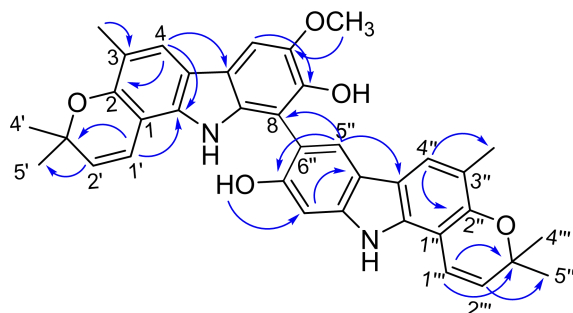


Figure S12 Key HMBC correlations of compounds **2**.



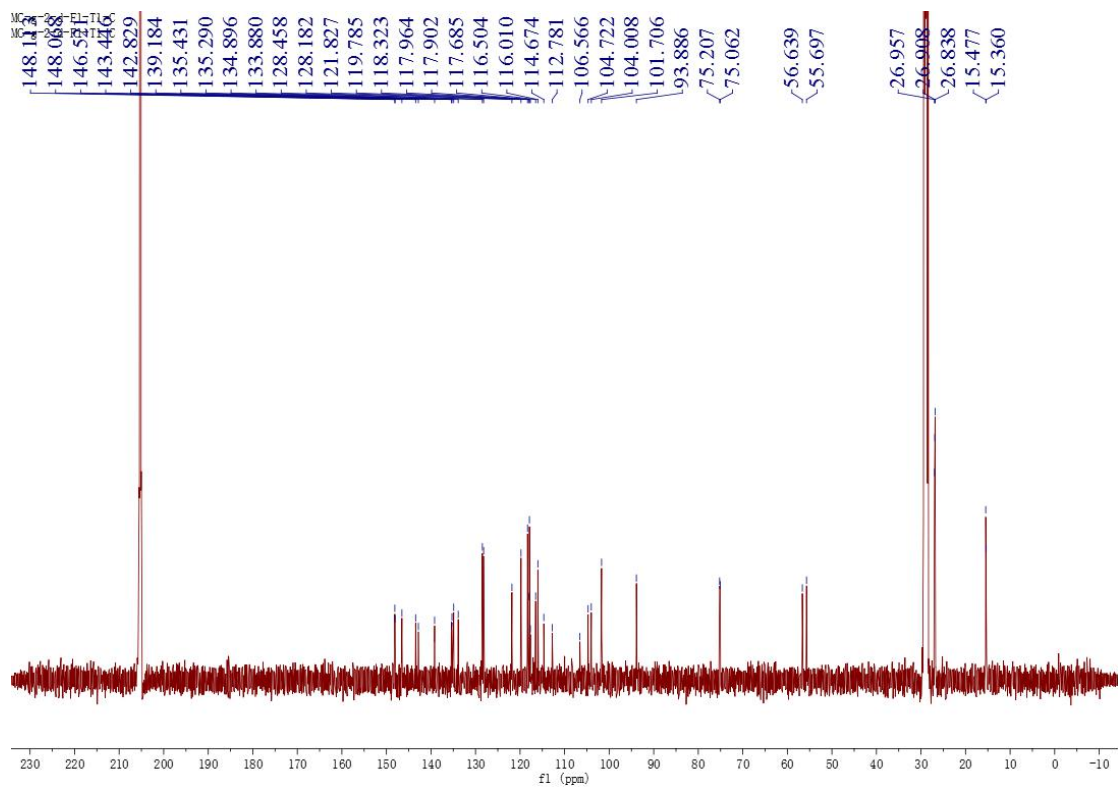


Figure S15 ^{13}C NMR spectrum (100 MHz, acetone- d_6) of compound **3**.

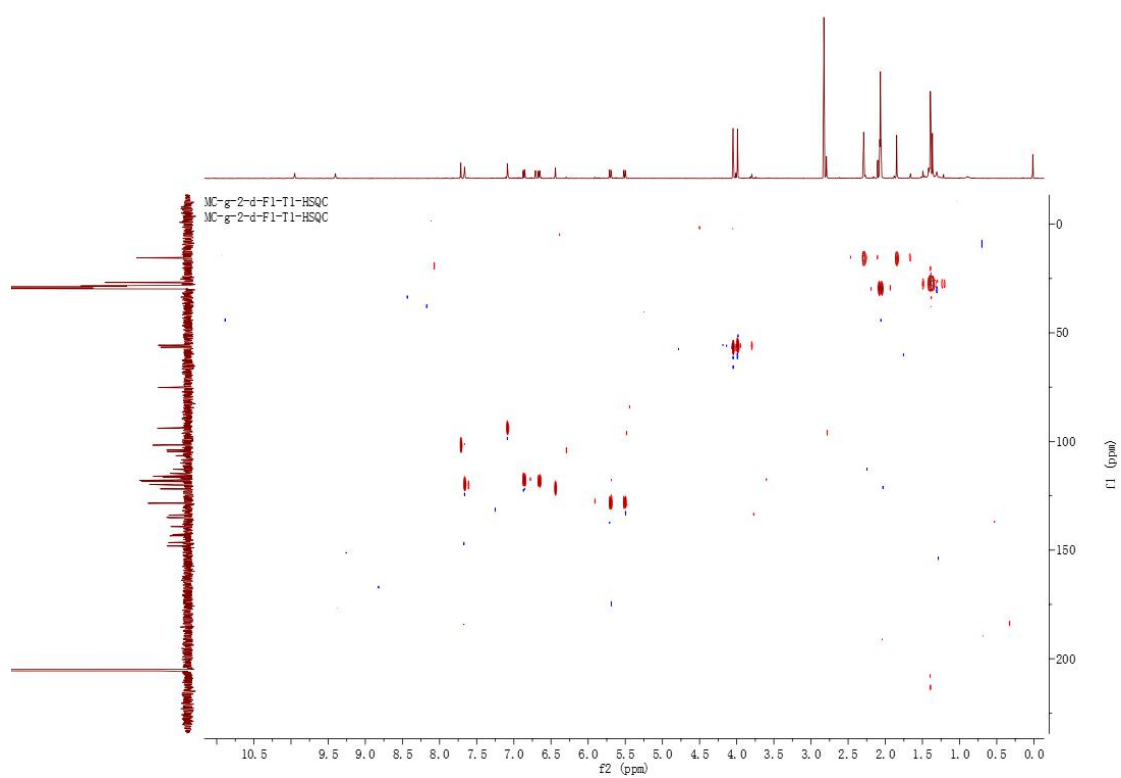


Figure S16 HSQC spectrum of compound **3**.

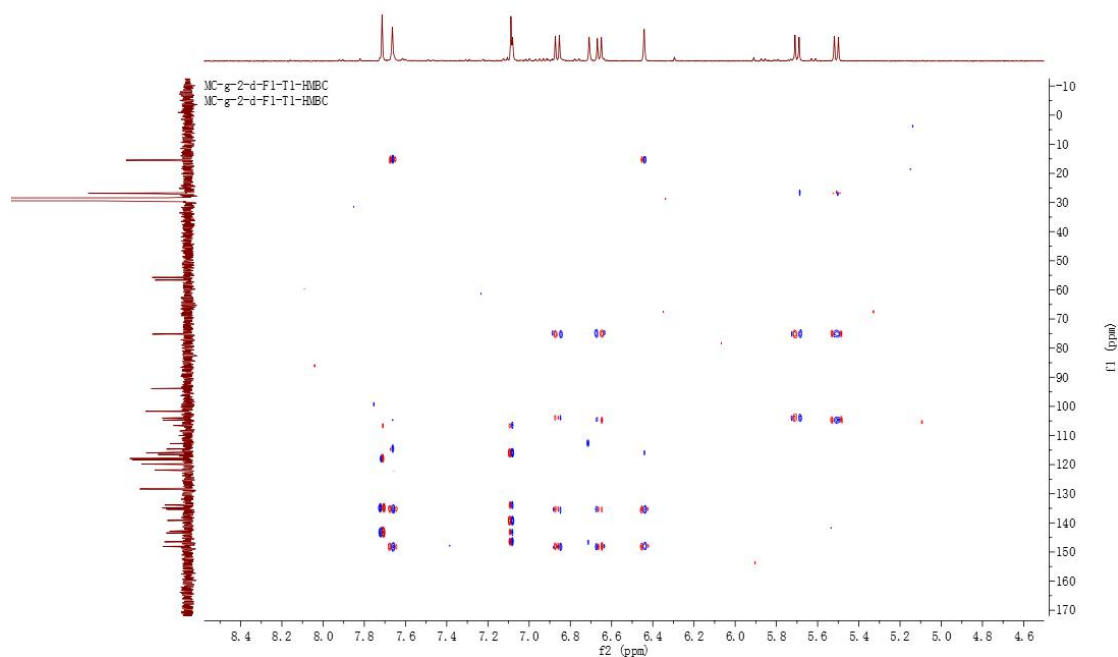


Figure S17 HMBC spectrum of compound **3**.

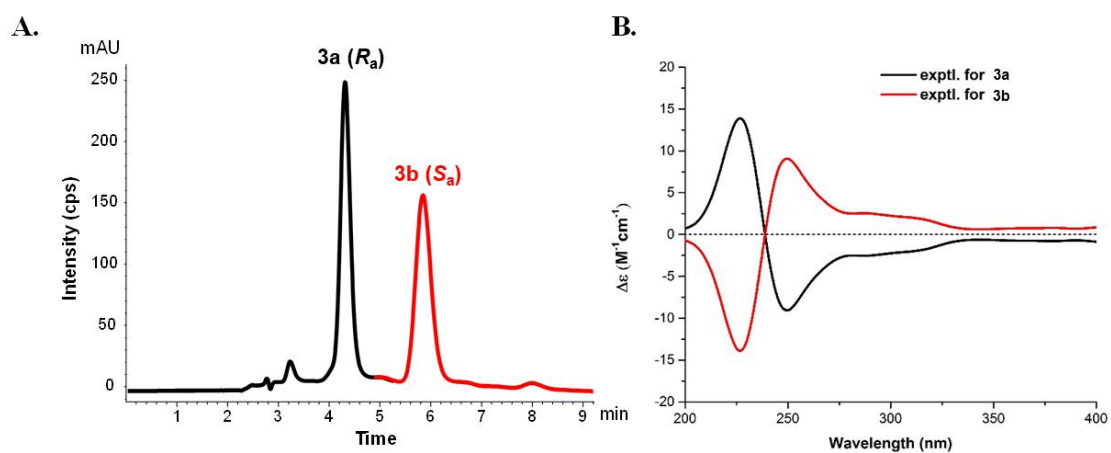


Figure S18 The chiral HPLC separation (A) and experimental ECD data (B) of compounds **3a** and **3b**.

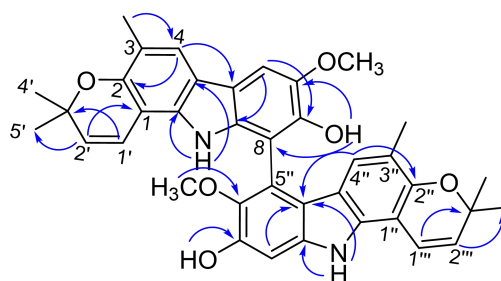


Figure S19 Key HMBC correlations of compounds **3**.

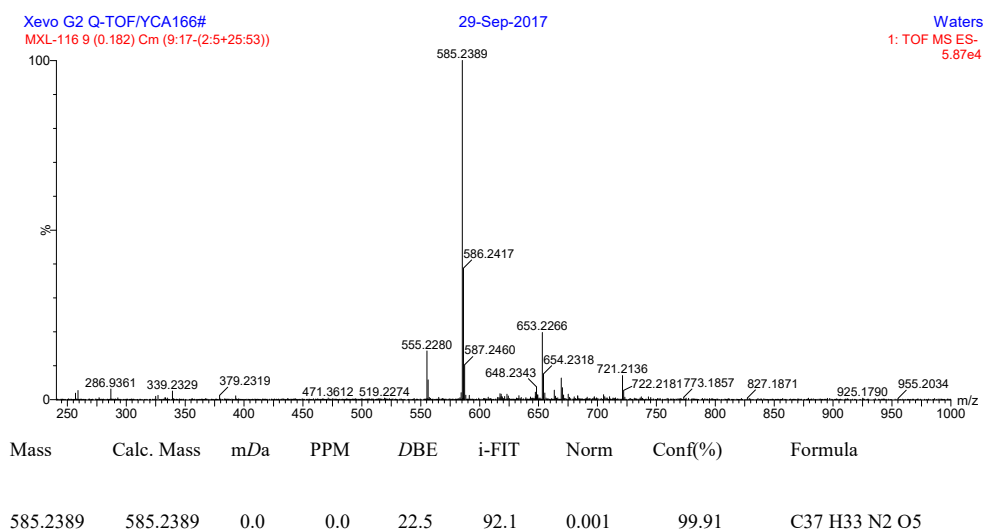


Figure S20 HRESIMS for compound **4**

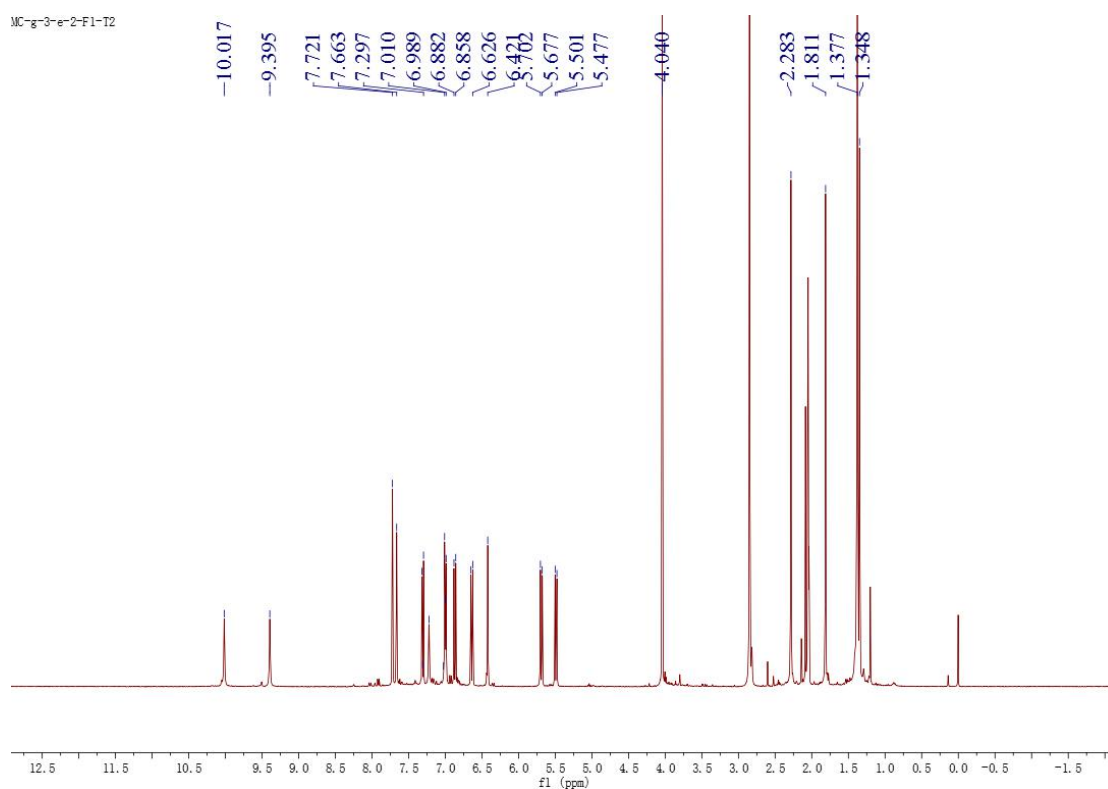


Figure S21 ^1H NMR spectrum (400 MHz, acetone- d_6) of compound **4**.

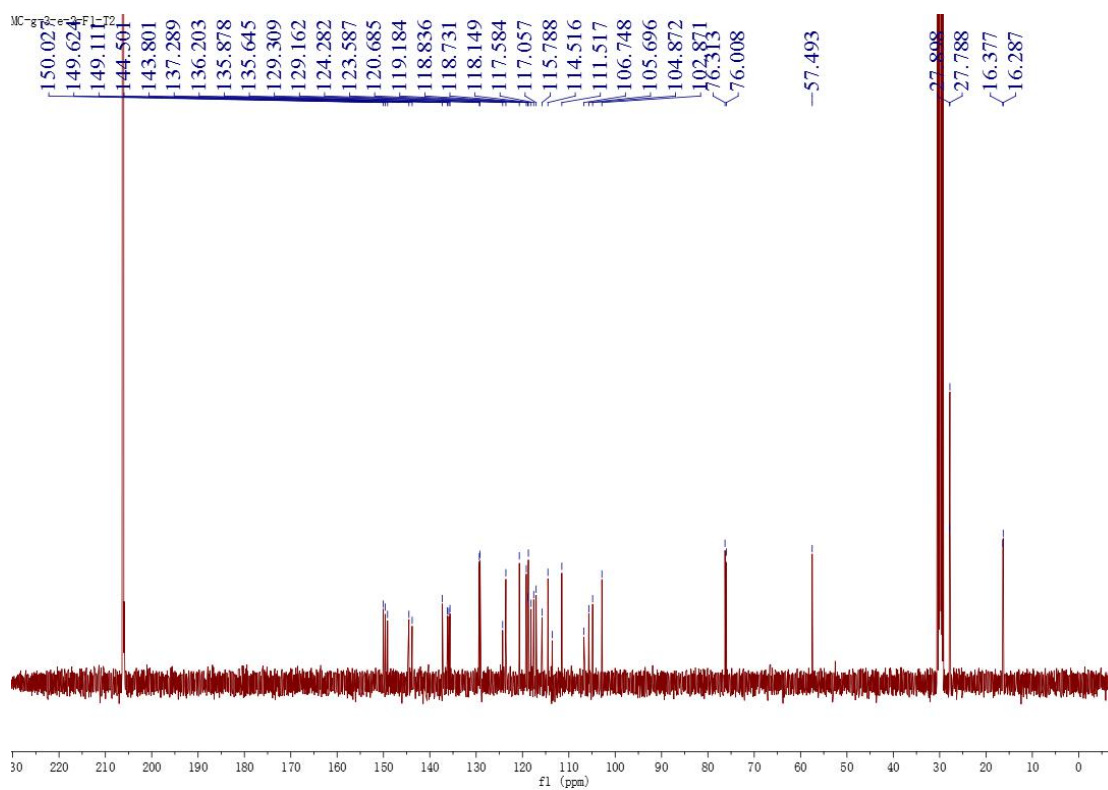


Figure S22 ^{13}C NMR spectrum (100 MHz, acetone- d_6) of compound **4**.

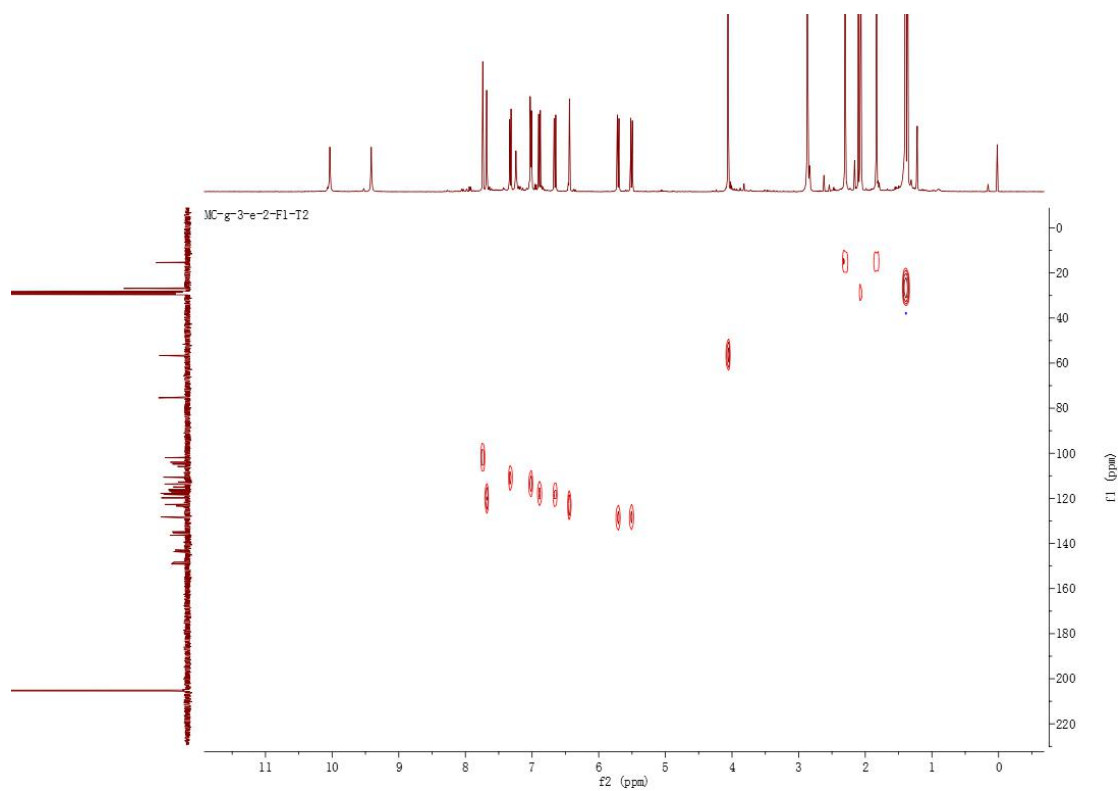


Figure S23 HSQC spectrum of compound **4**.

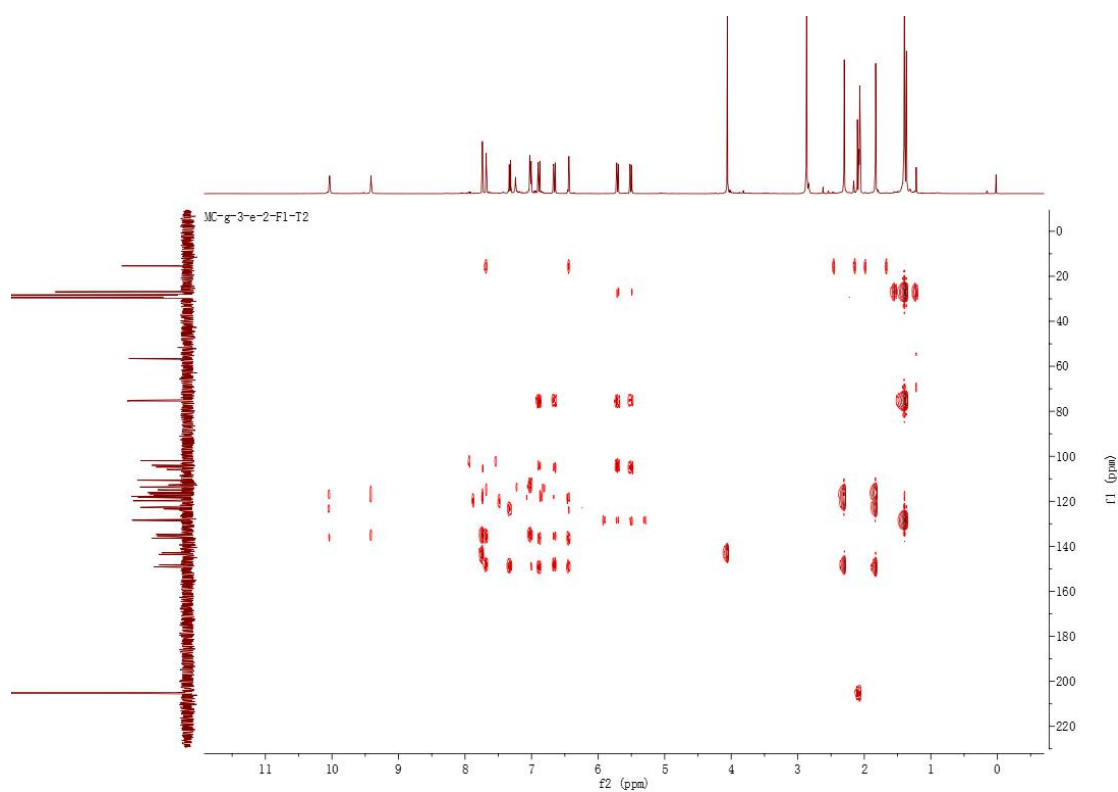


Figure S24 HMBC spectrum of compound **4**.

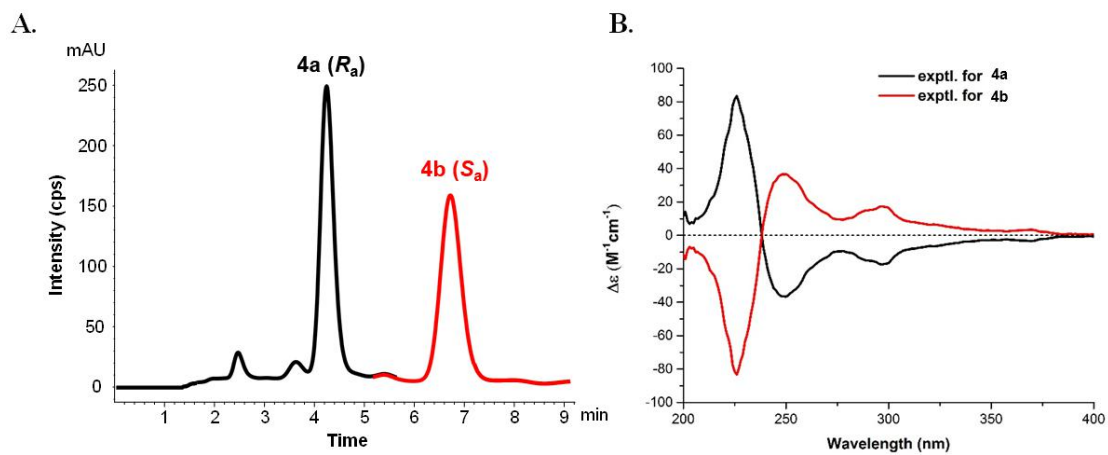


Figure S25 The chiral HPLC separation (A) and experimental ECD data (B) of compounds **4a** and **4b**.

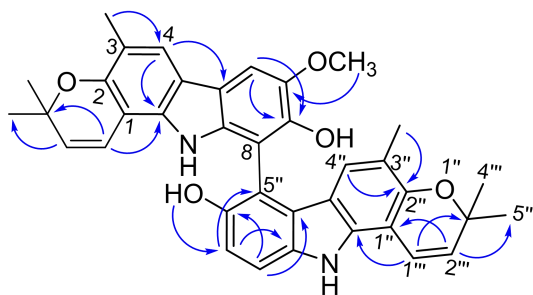


Figure S26 Key HMBC correlations of compounds **4**.

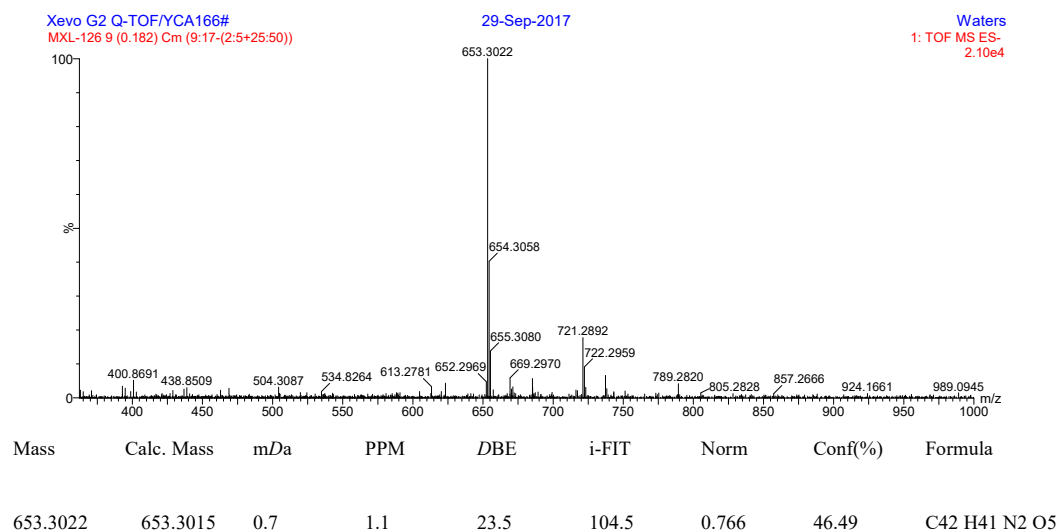


Figure S27 HRESIMS for compound **5**.

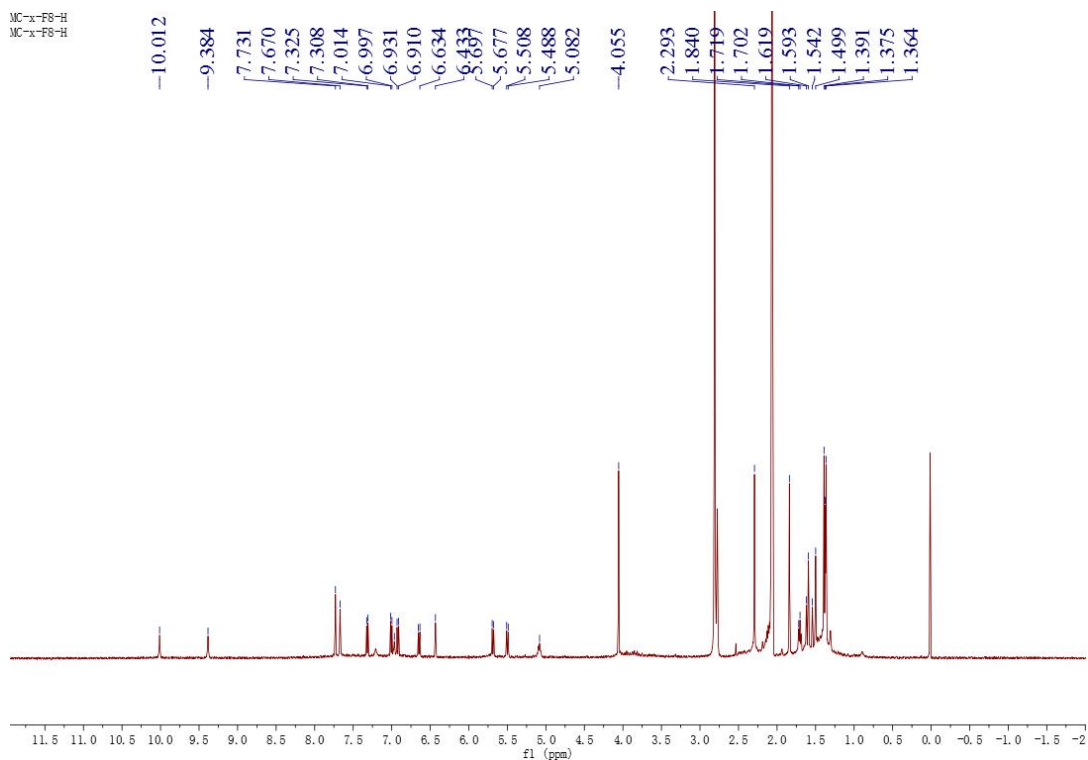


Figure S28 ^1H NMR spectrum (500 MHz, acetone- d_6) of compound **5**.

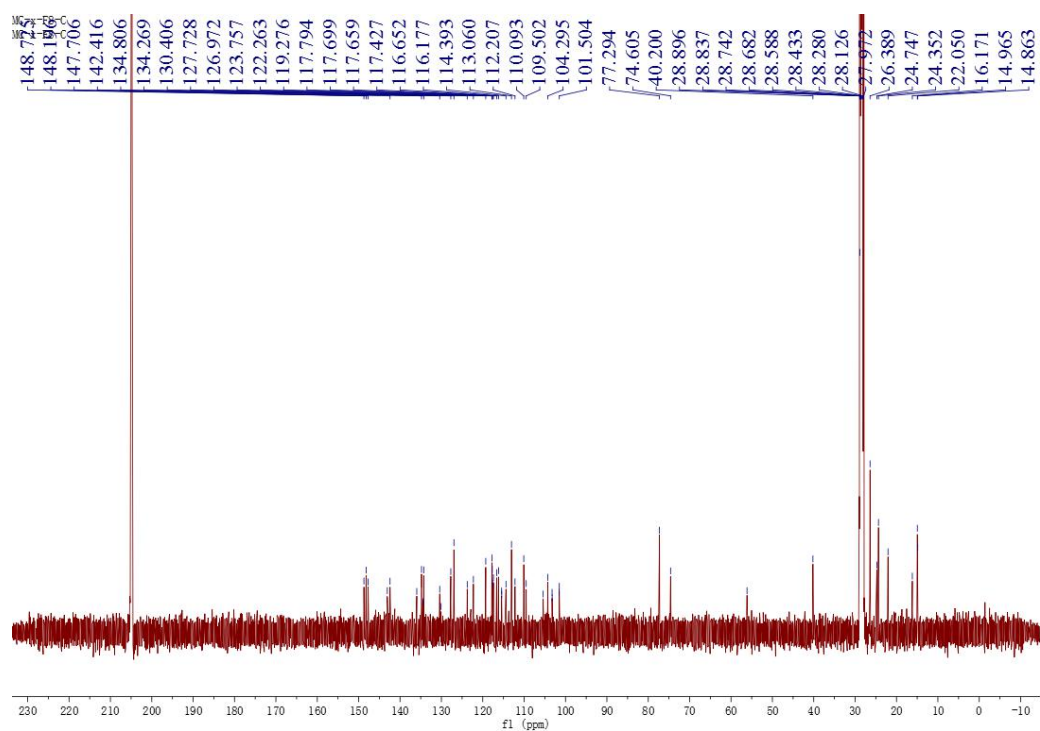


Figure S29 ^{13}C NMR spectrum (125 MHz, acetone- d_6) of compound **5**.

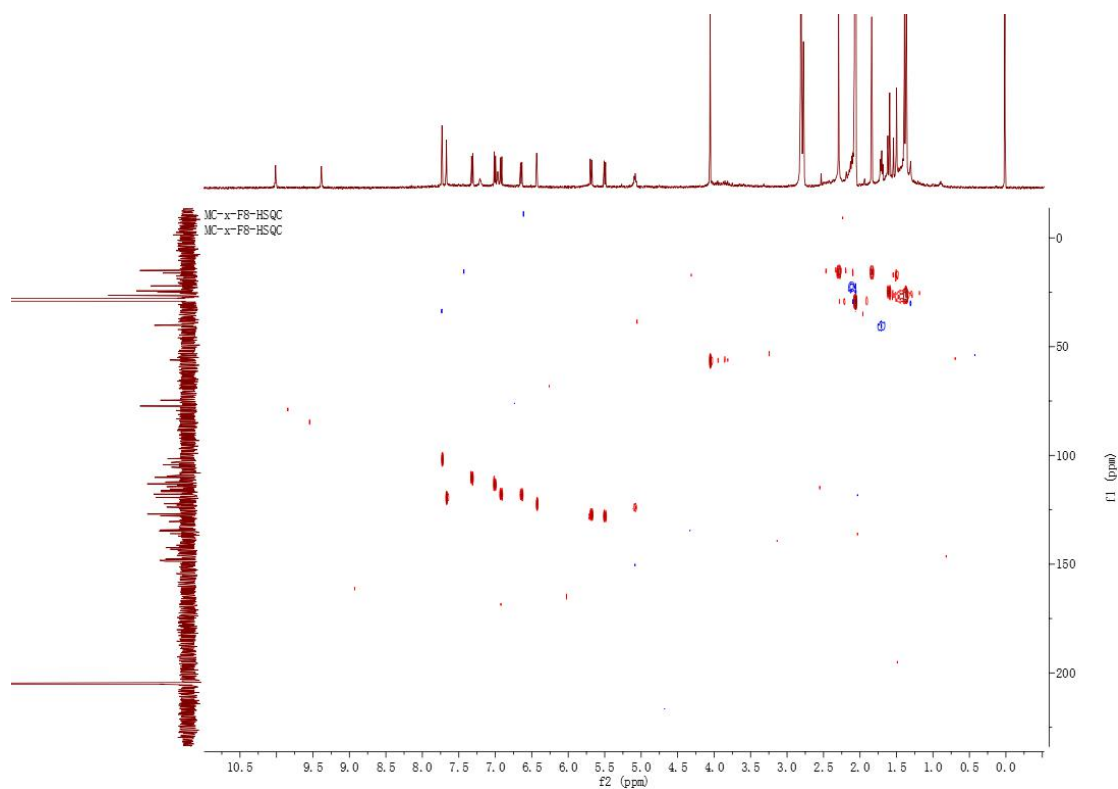


Figure S30 HSQC spectrum of compound **5**.

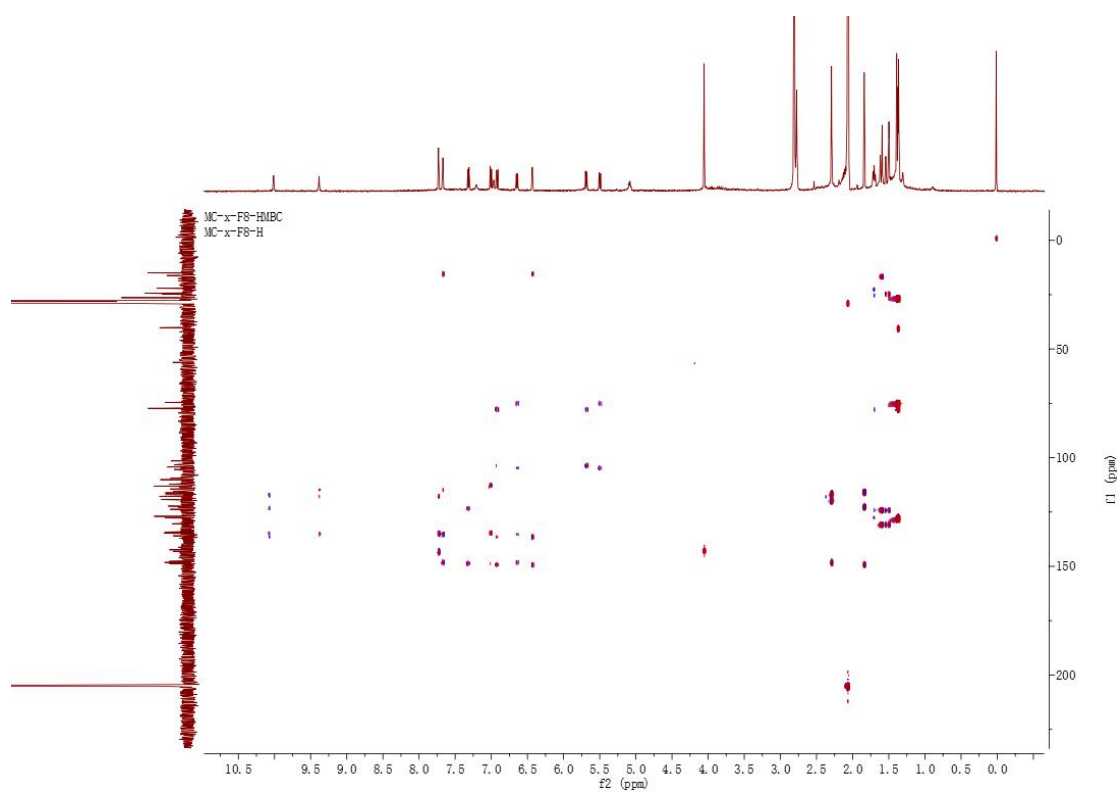


Figure S31 HMBC spectrum of compound **5**.

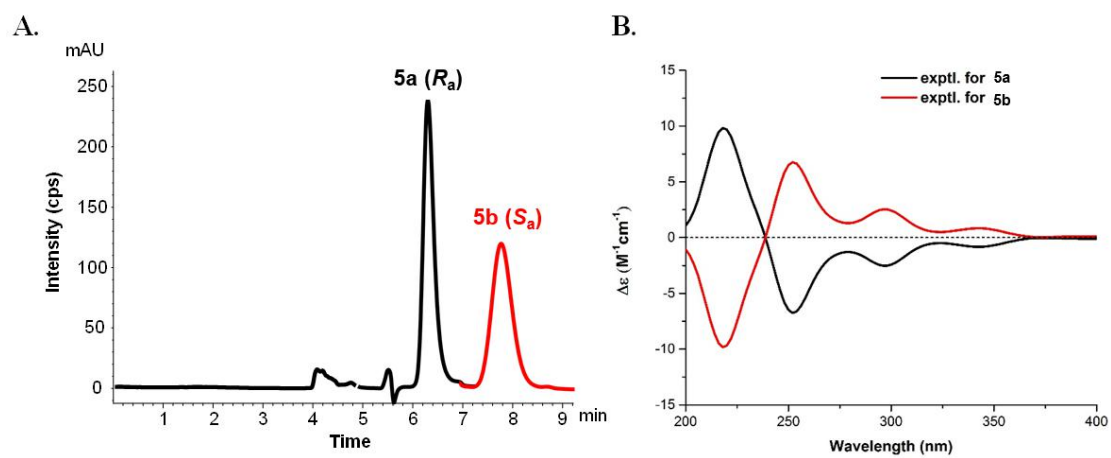


Figure S32 The chiral HPLC separation (A) and experimental ECD data (B) of compounds **5a** and **5b**.

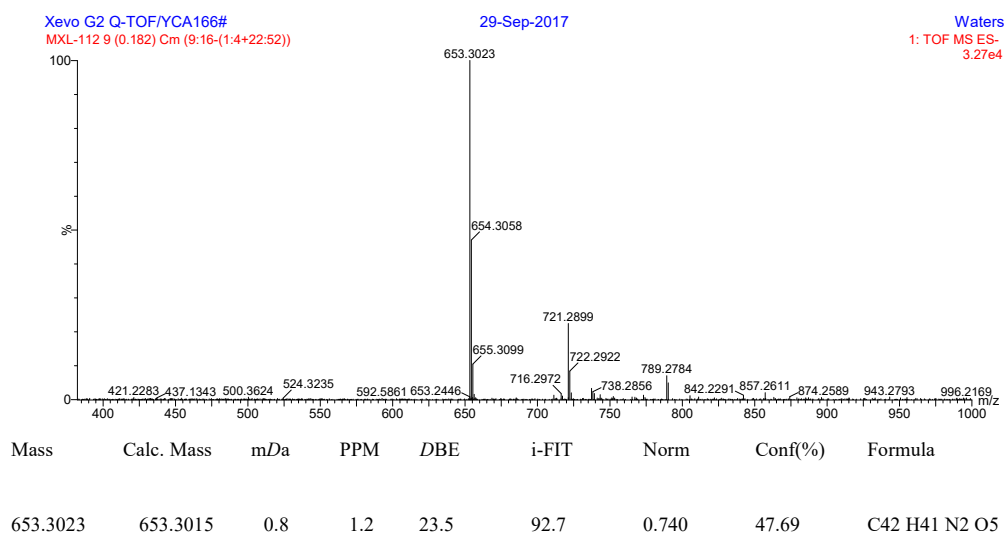


Figure S33 HRESIMS for compound **6**.

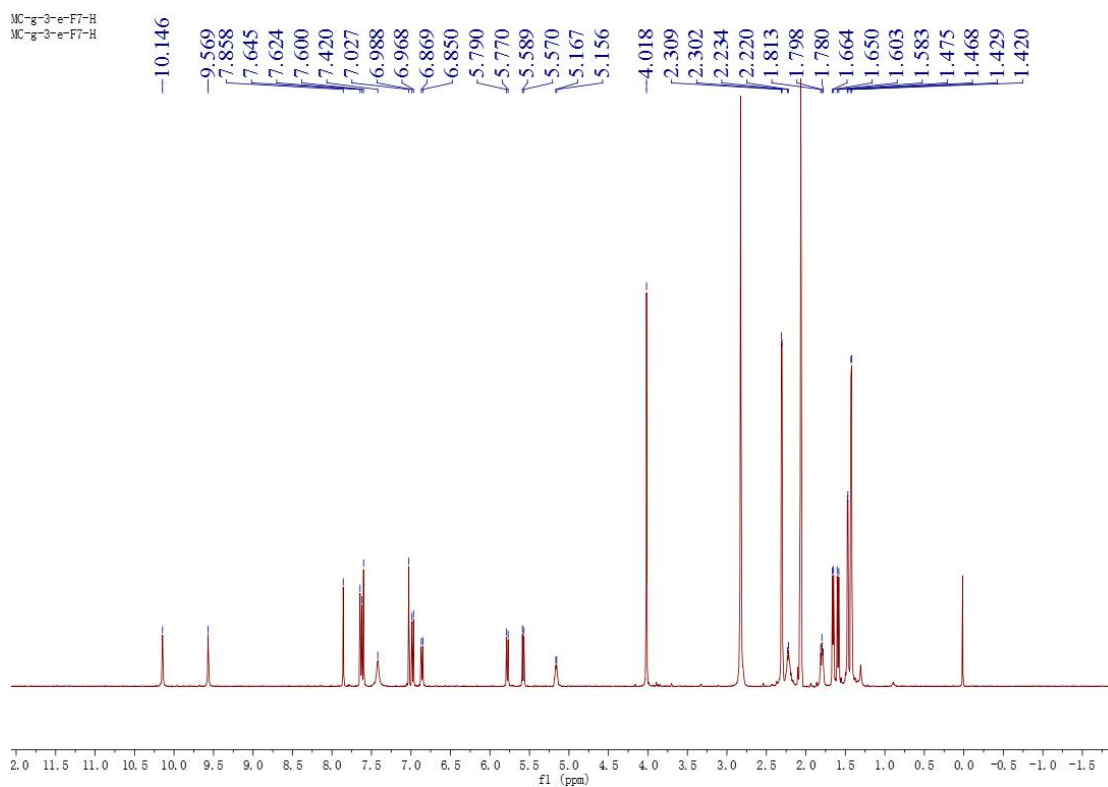


Figure S34 ^1H NMR spectrum (500 MHz, acetone- d_6) of compound **6**.

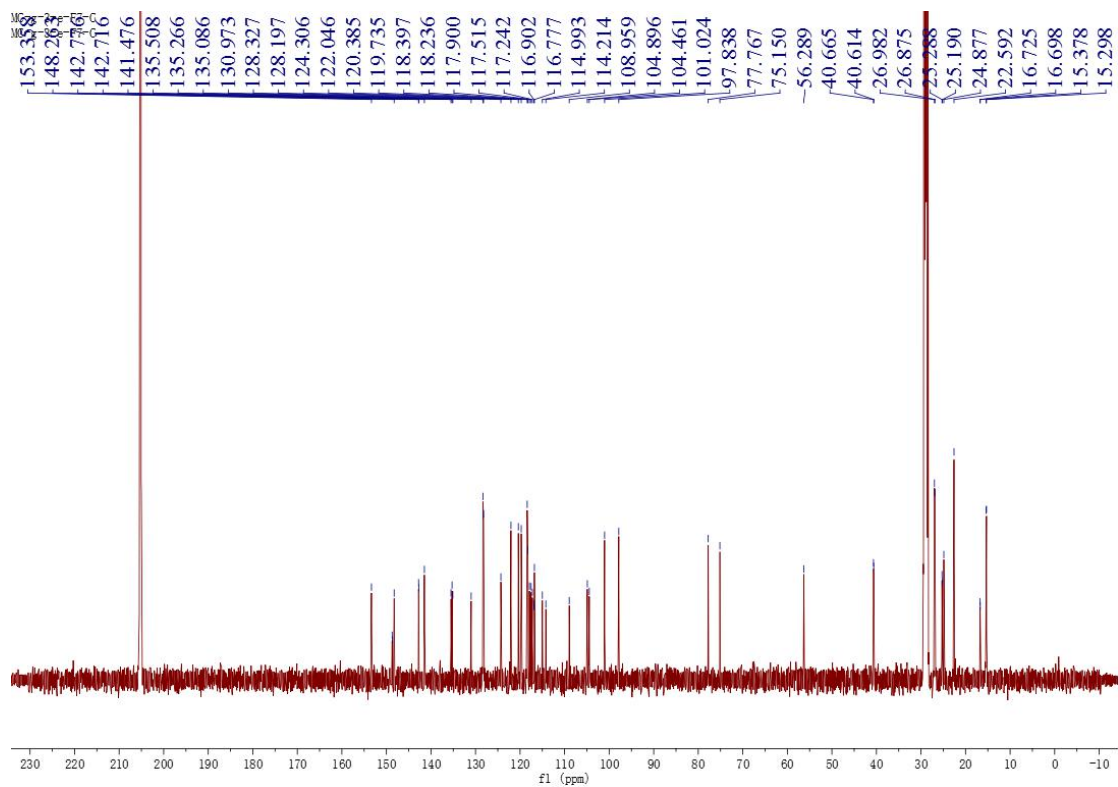


Figure S35 ^{13}C NMR spectrum (125 MHz, acetone- d_6) of compound **6**.

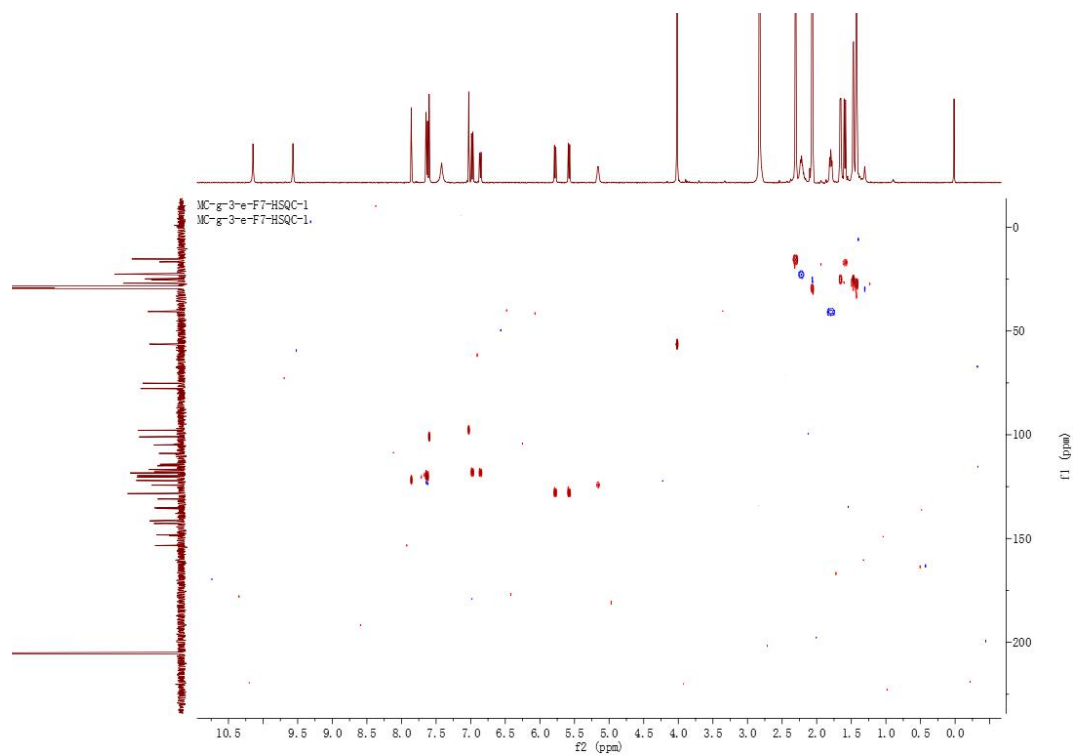


Figure S36 HSQC spectrum of compound **6**.

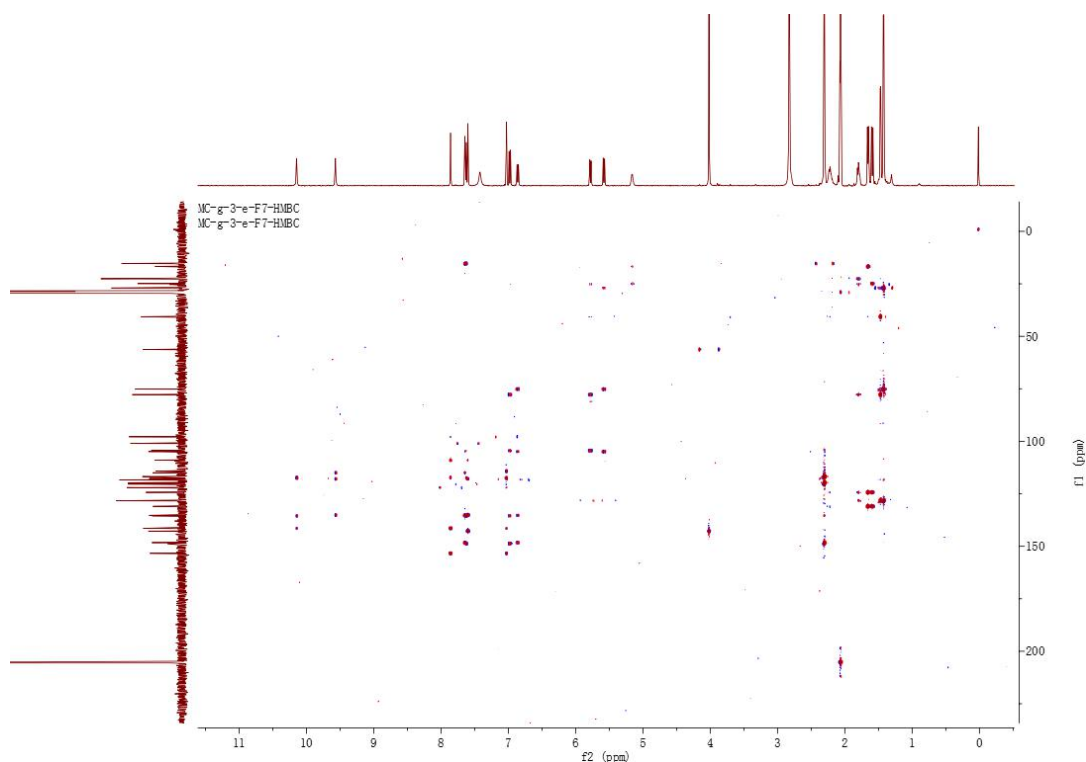


Figure S37 HMBC spectrum of compound **6**.

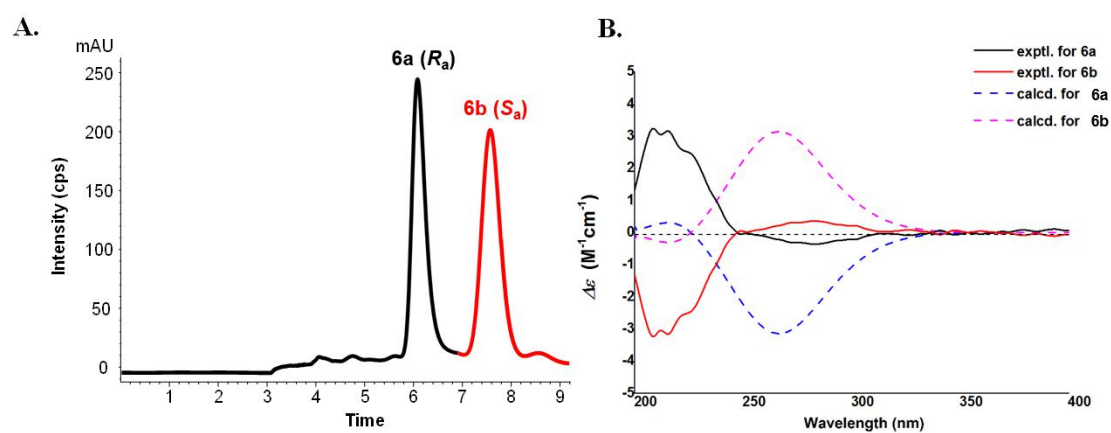


Figure S38 The chiral HPLC separation (A) and experimental and calculated ECD data (B) of compounds **6a** and **6b**.

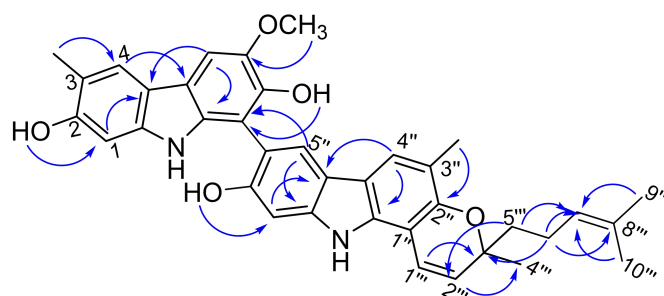


Figure S39 Key HMBC correlations of compounds **6**.

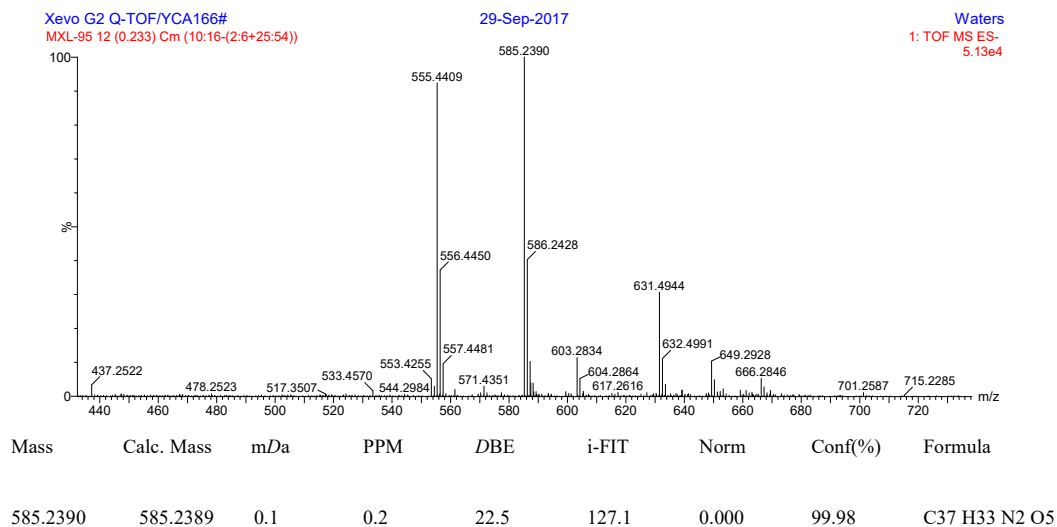


Figure S40 HRESIMS for compound **7**.

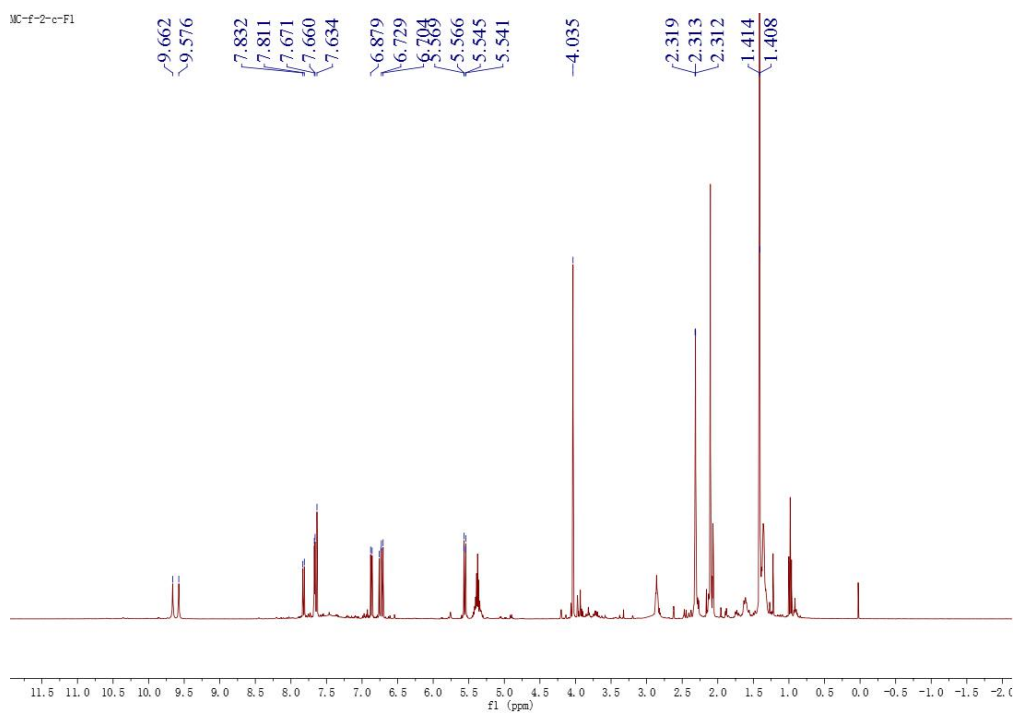


Figure S41 ^1H NMR spectrum (400 MHz, acetone- d_6) of compound **7**.

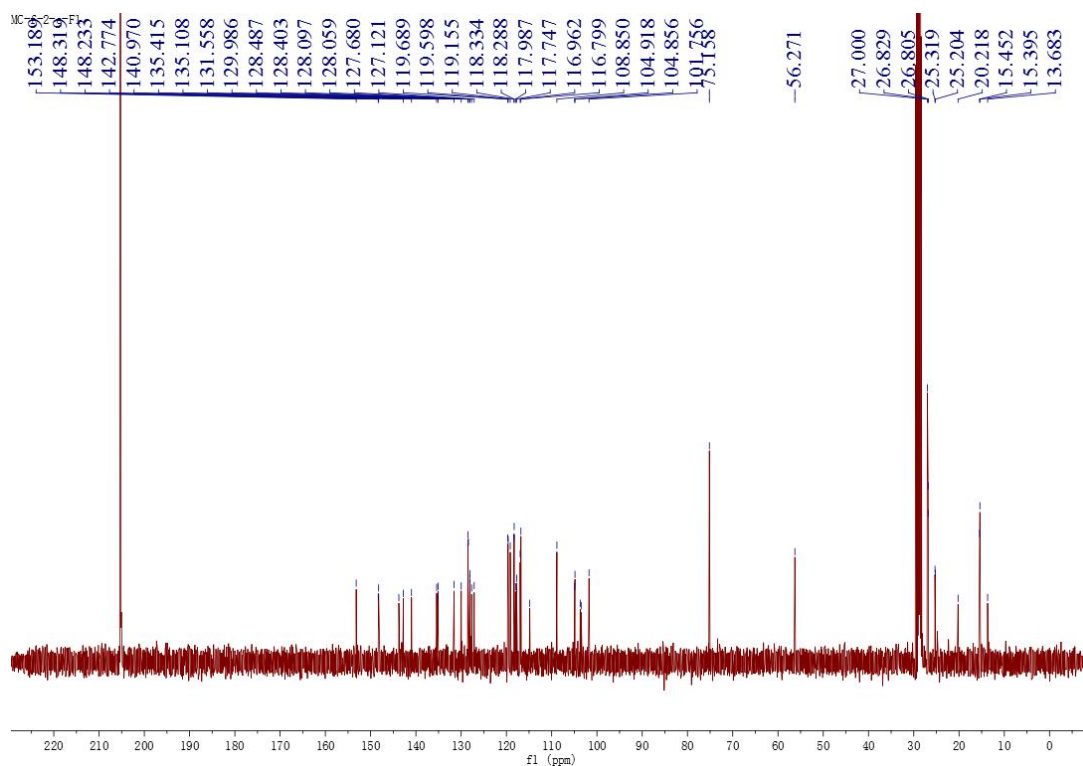


Figure S42 ^{13}C NMR spectrum (100 MHz, acetone- d_6) of compound 7.

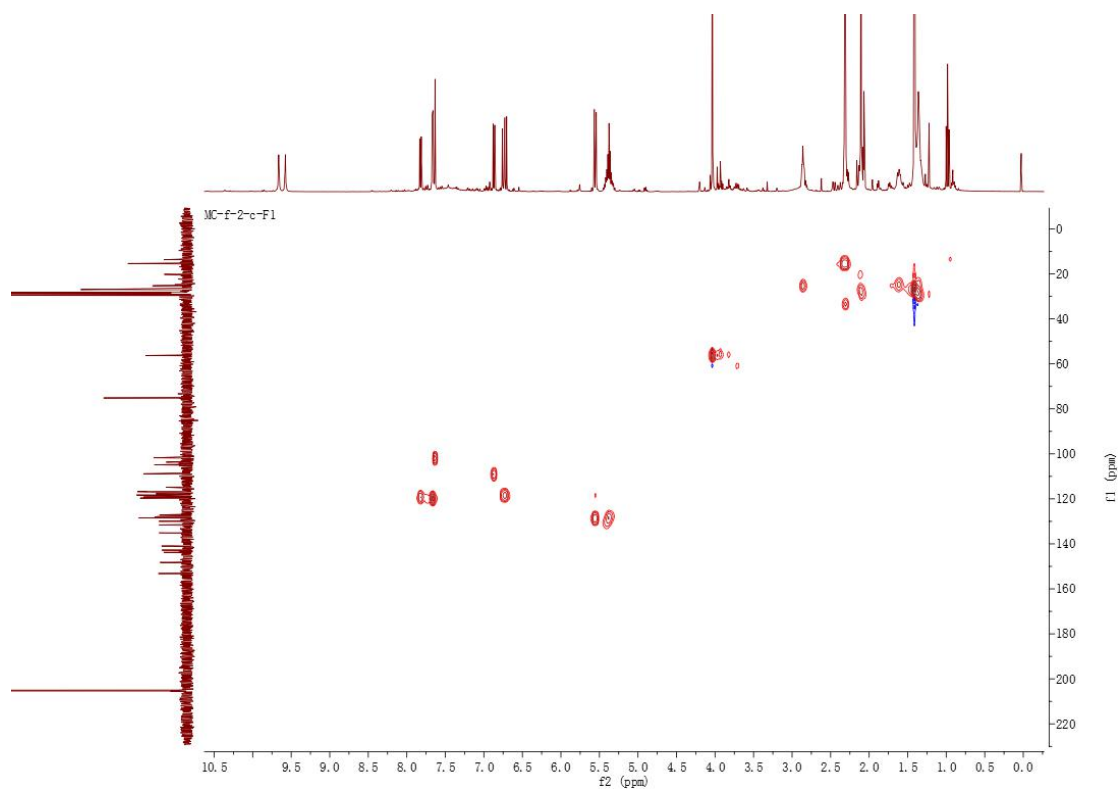


Figure S43 HSQC spectrum of compound 7.

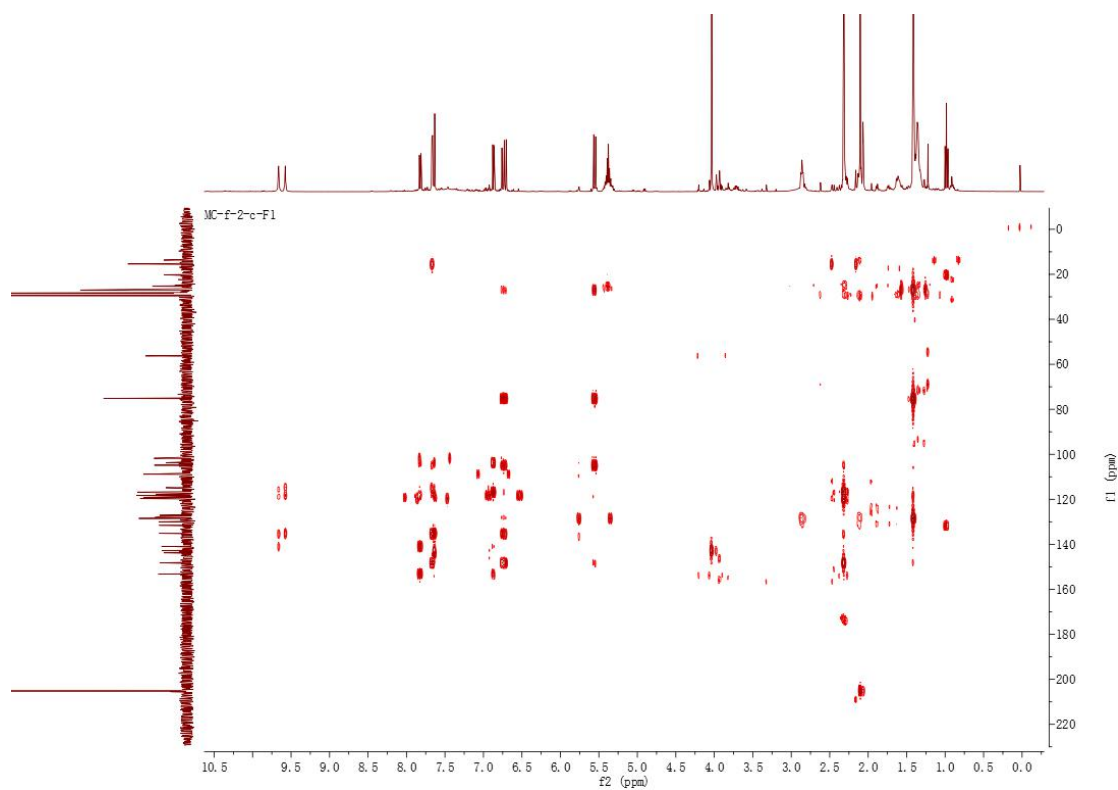


Figure S44 HMBC spectrum of compound **7**.

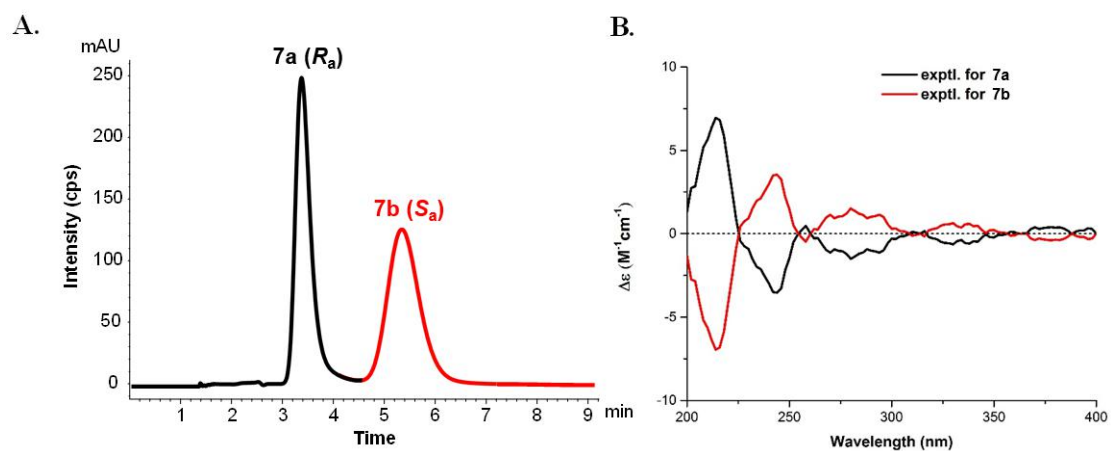


Figure S45 The chiral HPLC separation (A) and experimental ECD data (B) of compounds **7a** and **7b**.

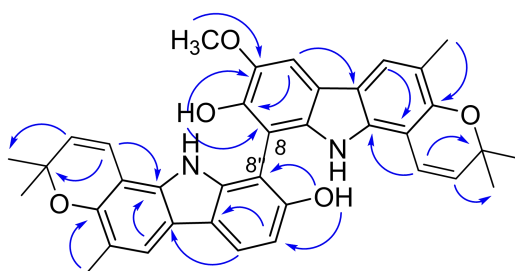


Figure S46 Key HMBC correlations of compound **7**.

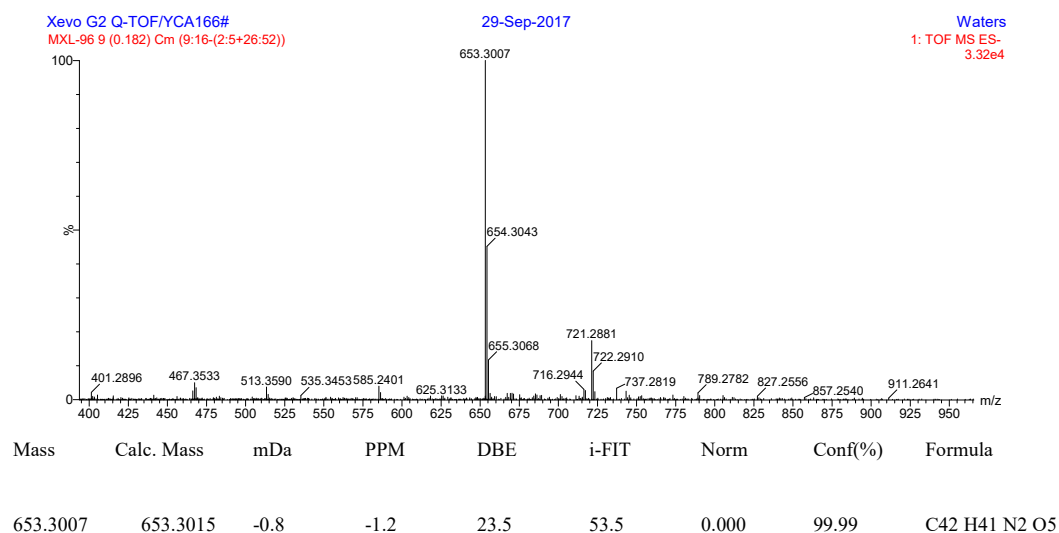


Figure S47 HRESIMS for compound **8**.

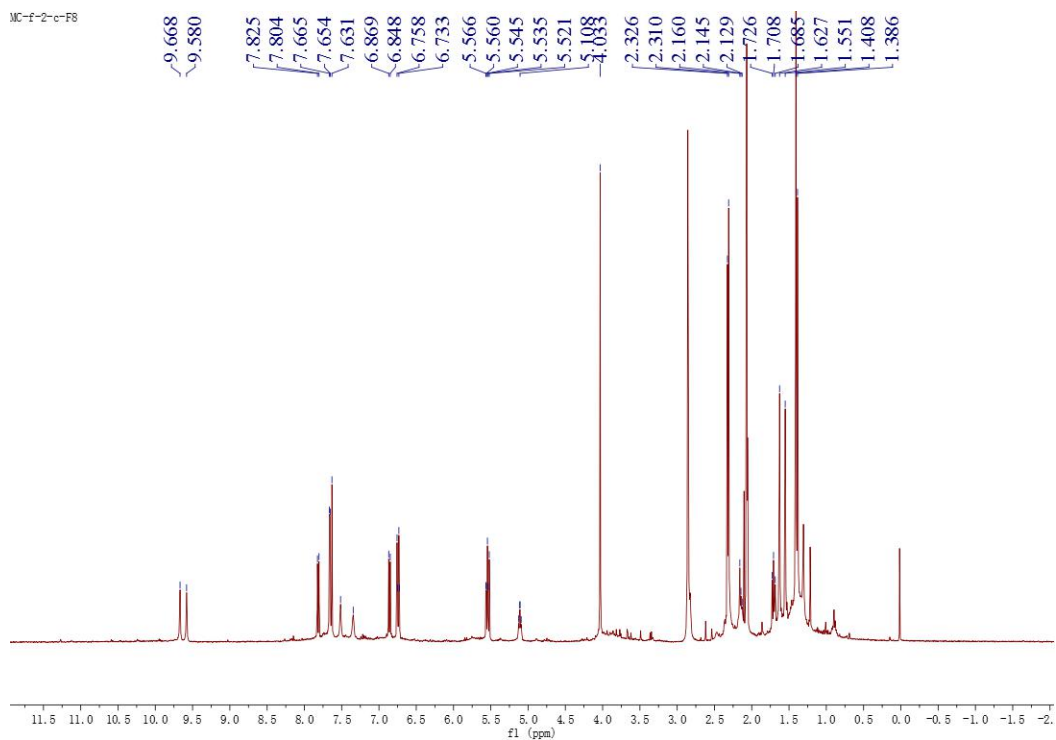


Figure S48 ^1H NMR spectrum (400 MHz, acetone- d_6) of compound **8**.

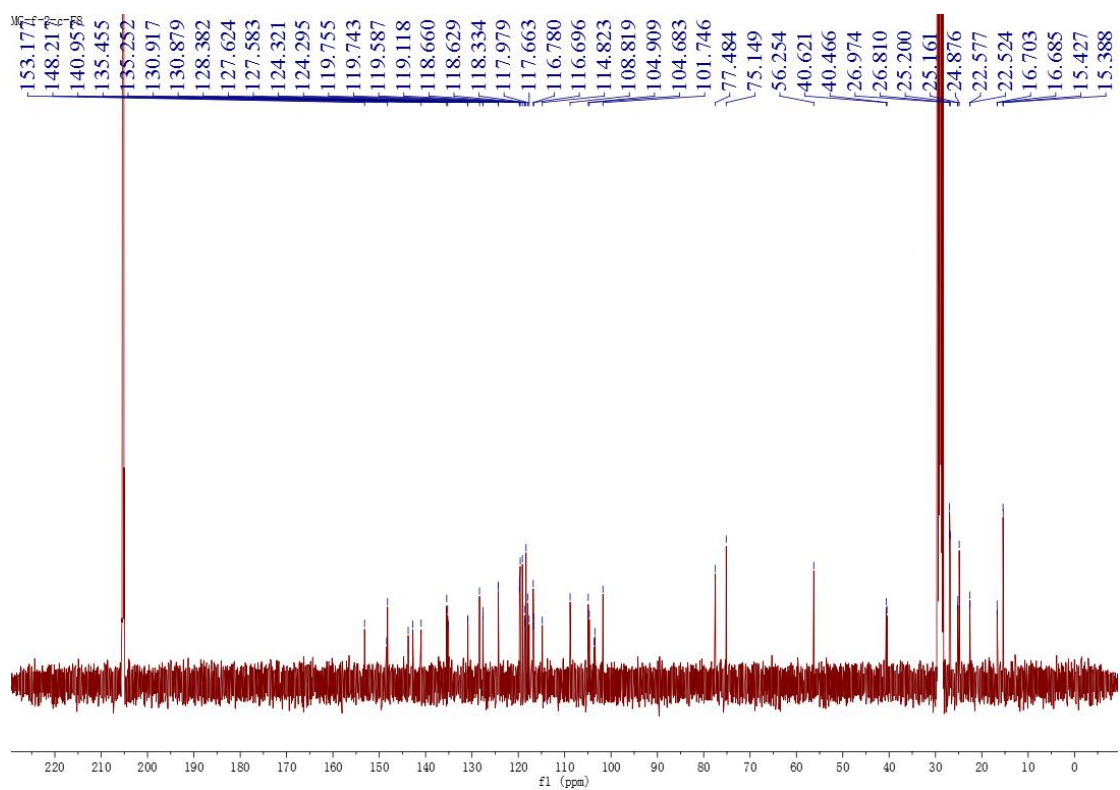


Figure S49 ^{13}C NMR spectrum (100 MHz, acetone- d_6) of compound **8**.

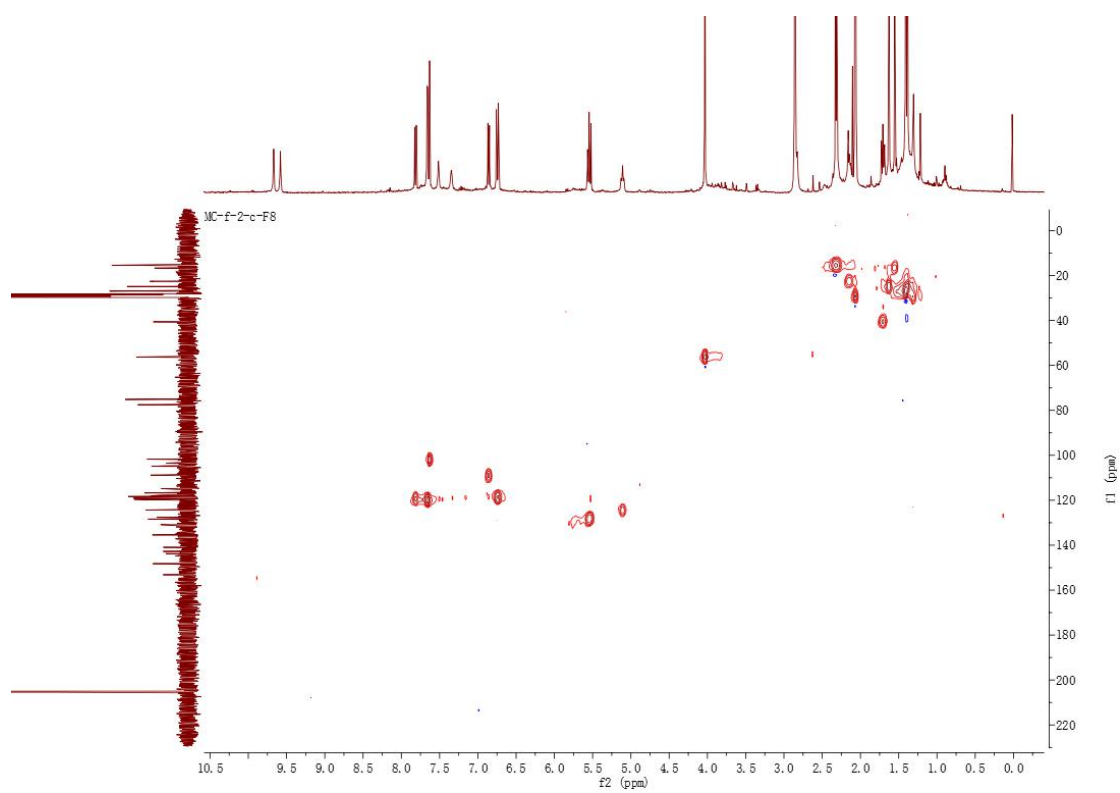


Figure S50 HSQC spectrum of compound **8**.

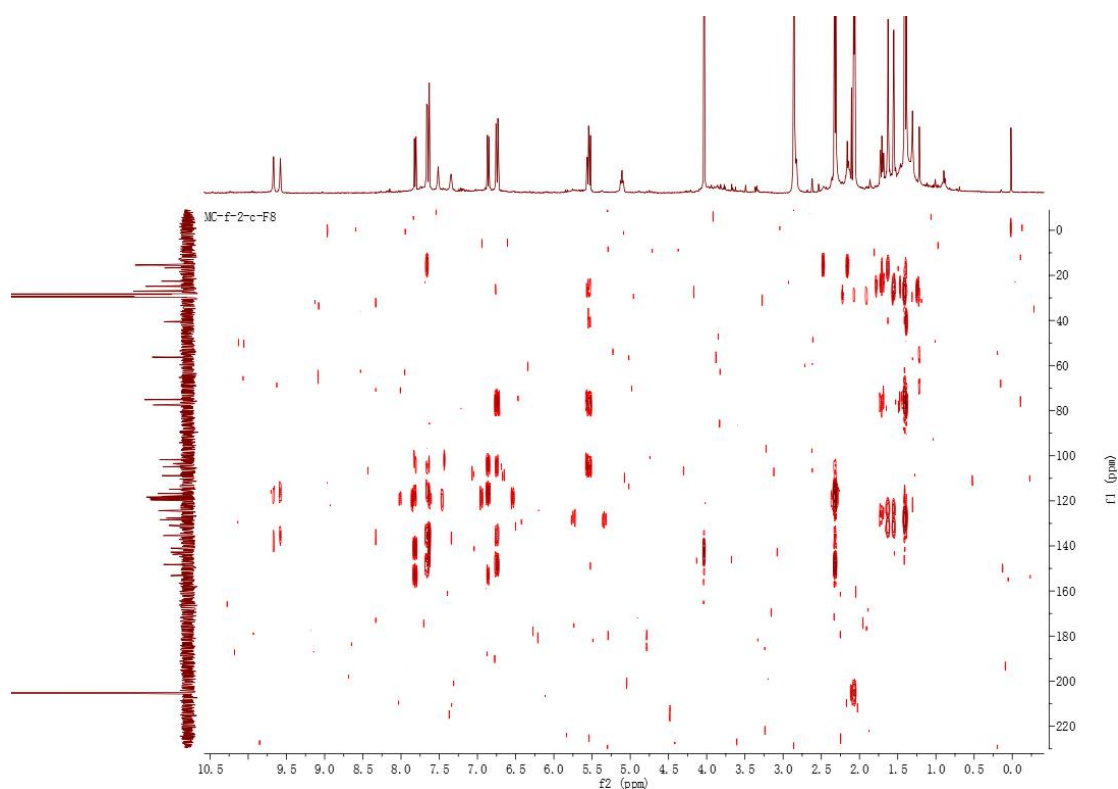


Figure S51 HMBC spectrum of compound **8**.

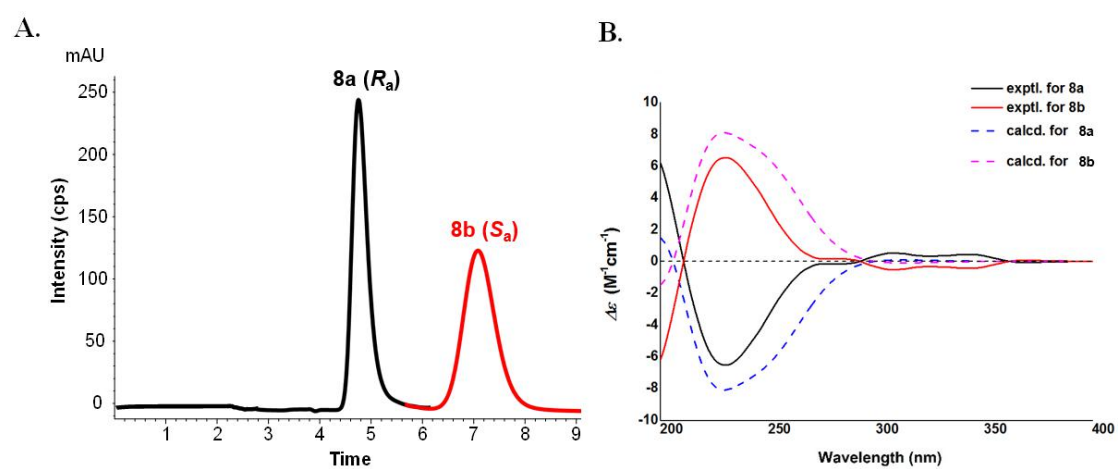


Figure S52 The chiral HPLC separation (A) and experimental and calculated ECD data (B) of compounds **8a** and **8b**.

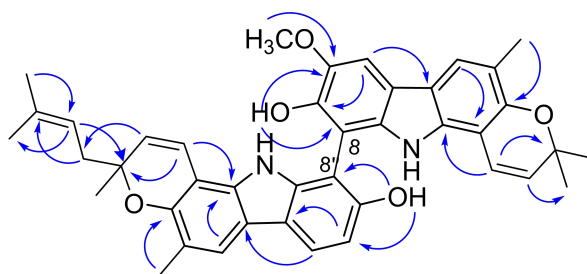


Figure S53 Key HMBC correlations of compounds **8**.

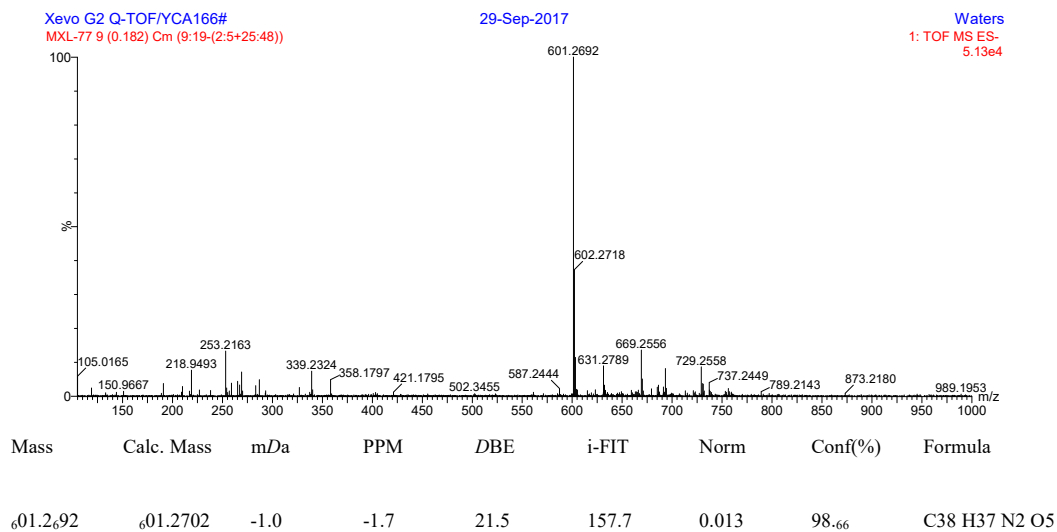


Figure S54 HRESIMS for compound **9**.

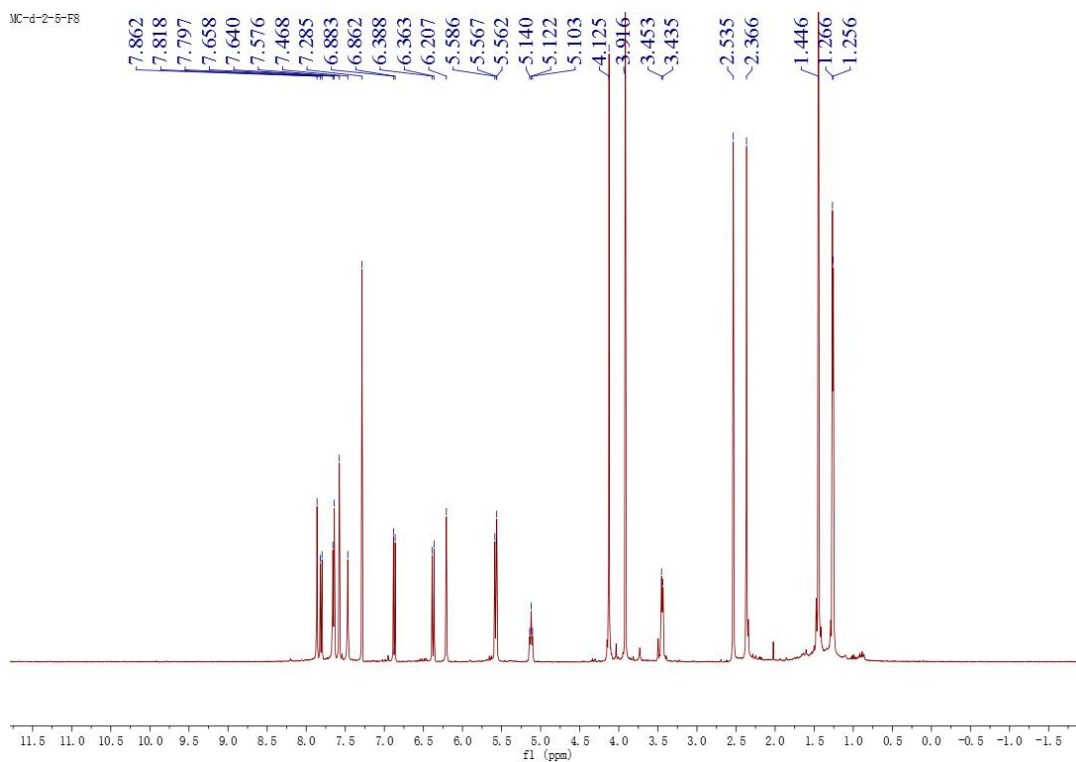


Figure S55 ^1H NMR spectrum (400 MHz, CDCl_3) of compound **9**.

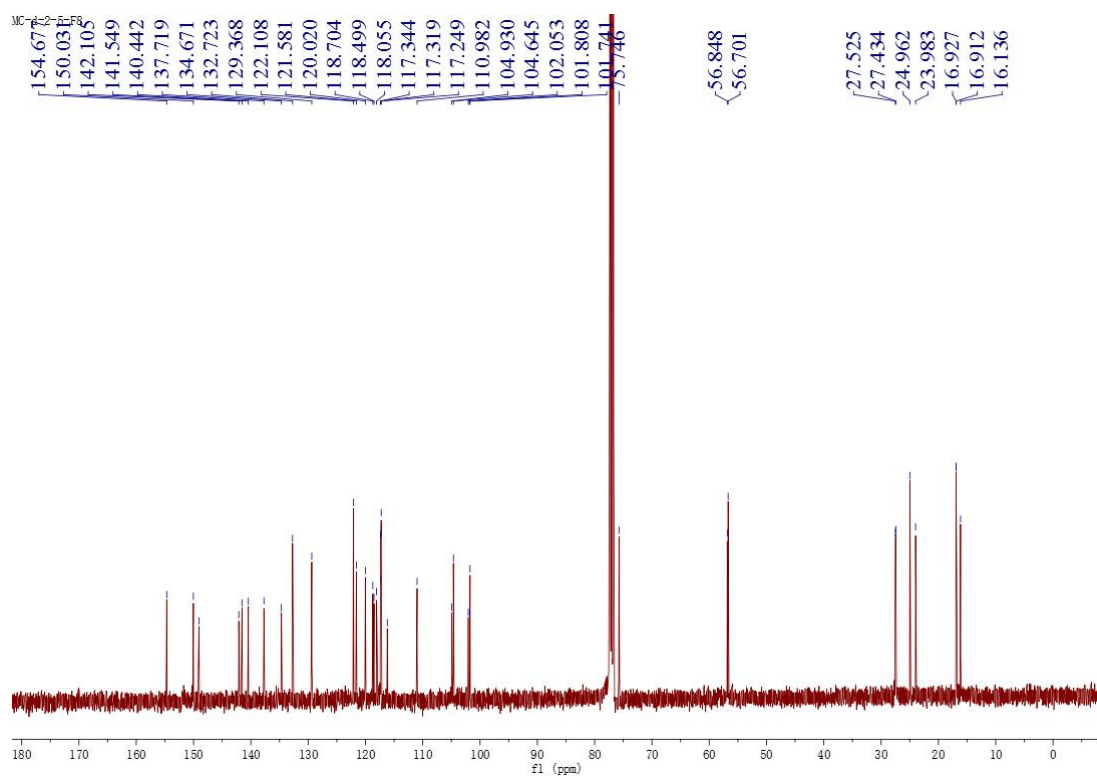


Figure S56 ^{13}C NMR spectrum (100 MHz, CDCl_3) of compound **9**.

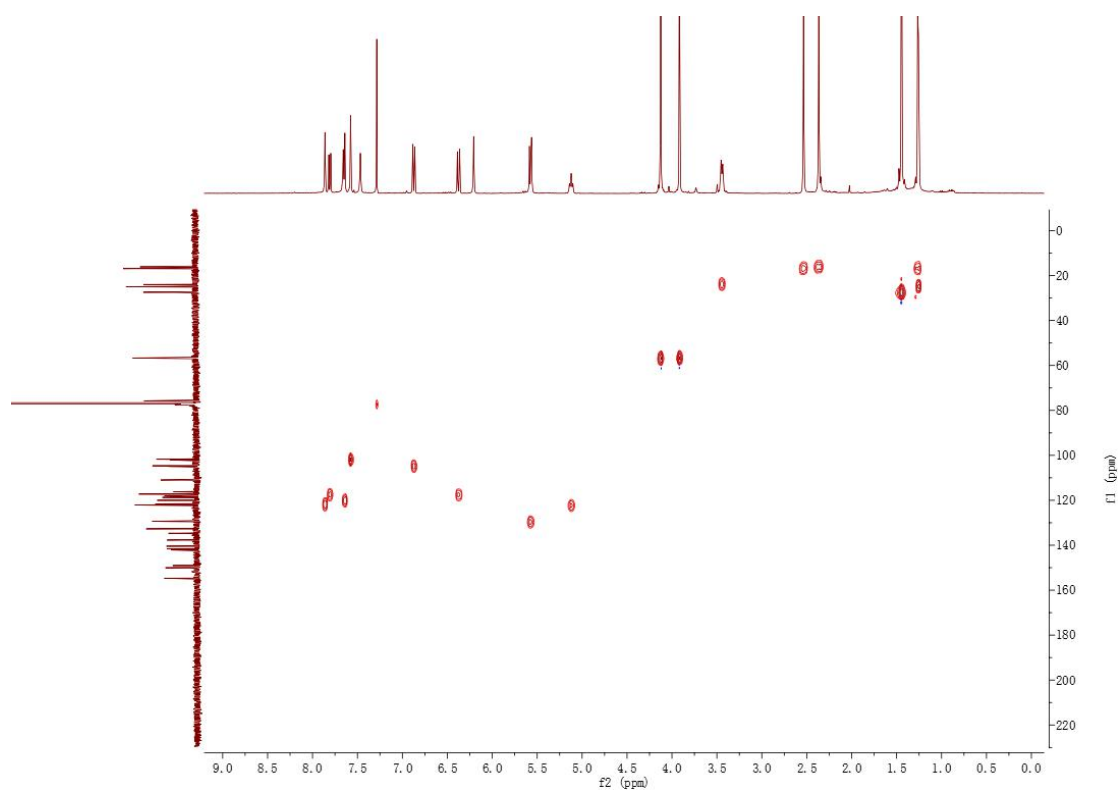


Figure S57 HSQC spectrum of compound **9**.

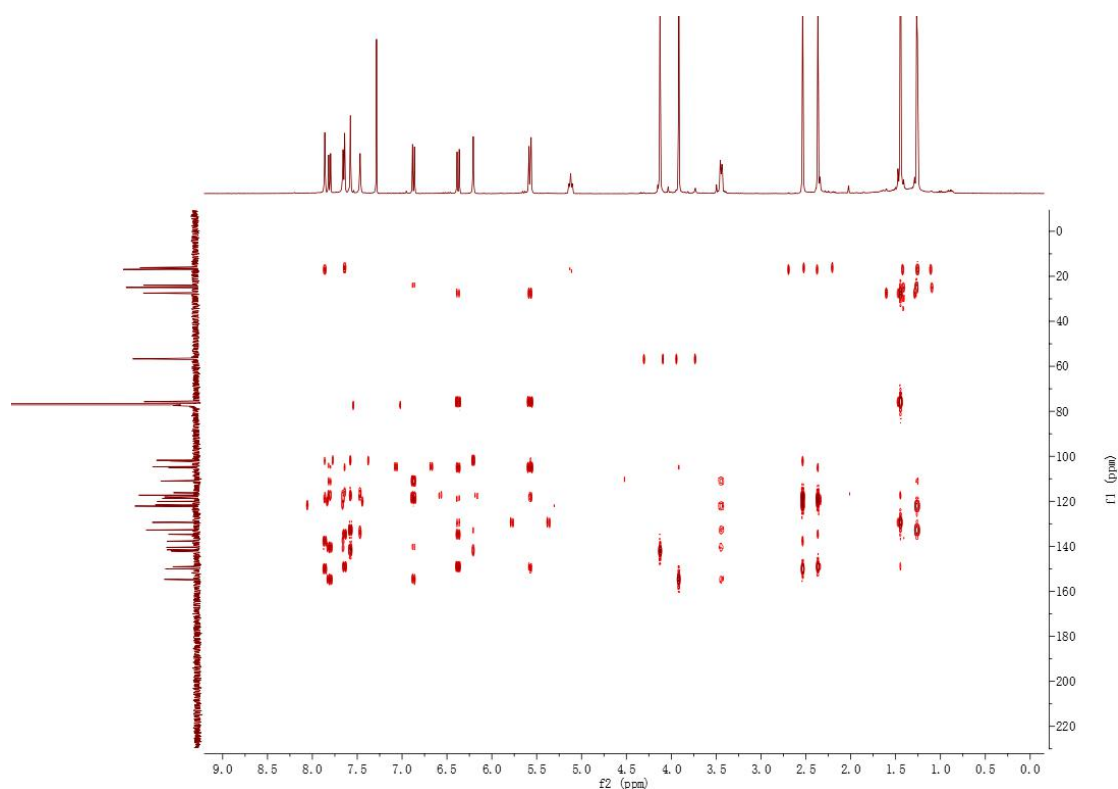


Figure S58 HMBC spectrum of compound **9**.

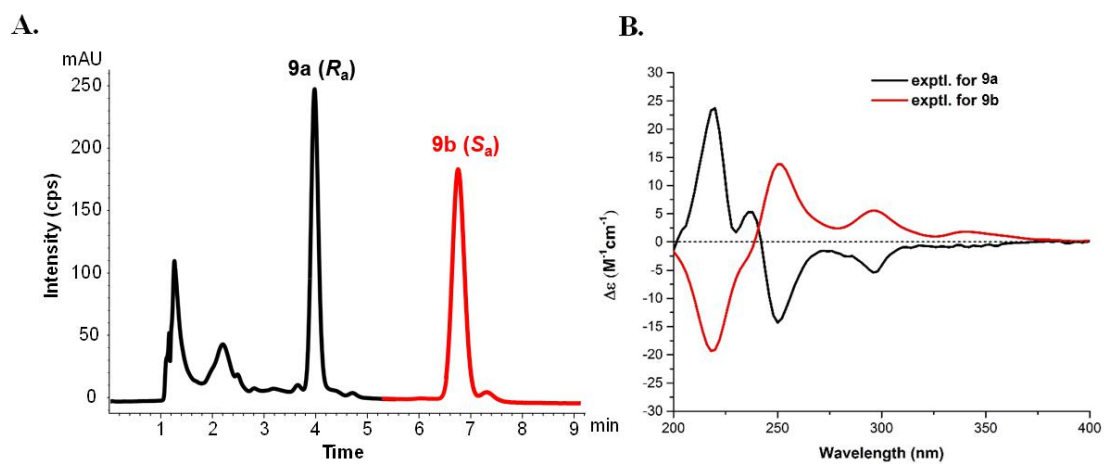


Figure S59 The chiral HPLC separation (A) and experimental ECD data (B) of compounds **9a** and **9b**.

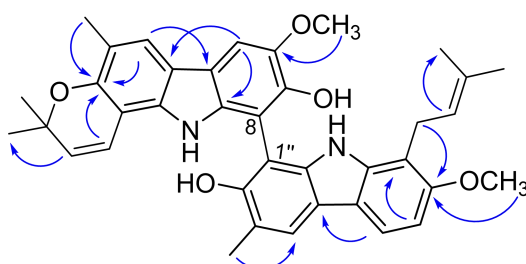


Figure S60 Key HMBC correlations of compounds **9**.

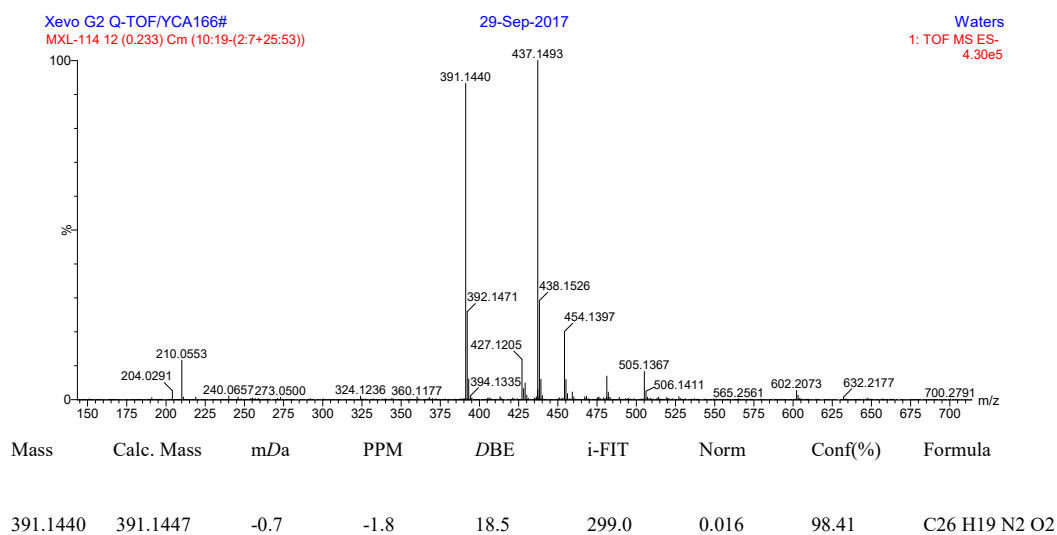


Figure S61 HRESIMS for compound **10**.

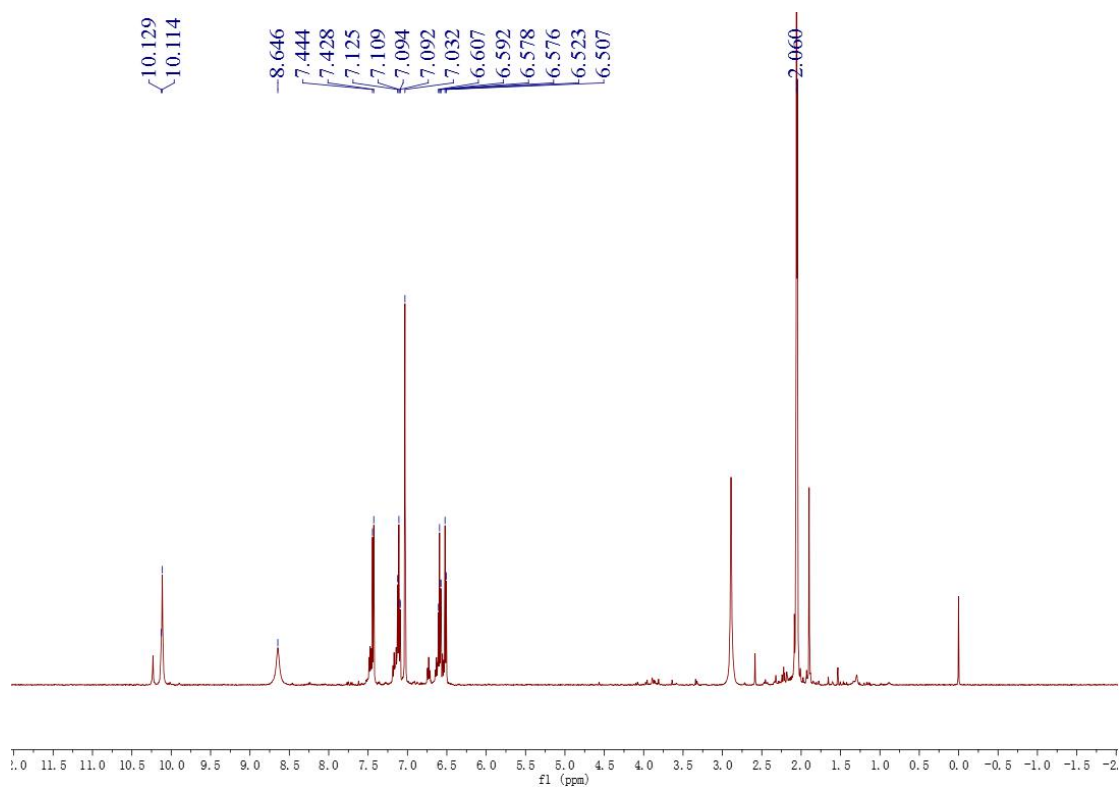


Figure S62 ¹H NMR spectrum (500 MHz, acetone-*d*₆) of compound **10**.

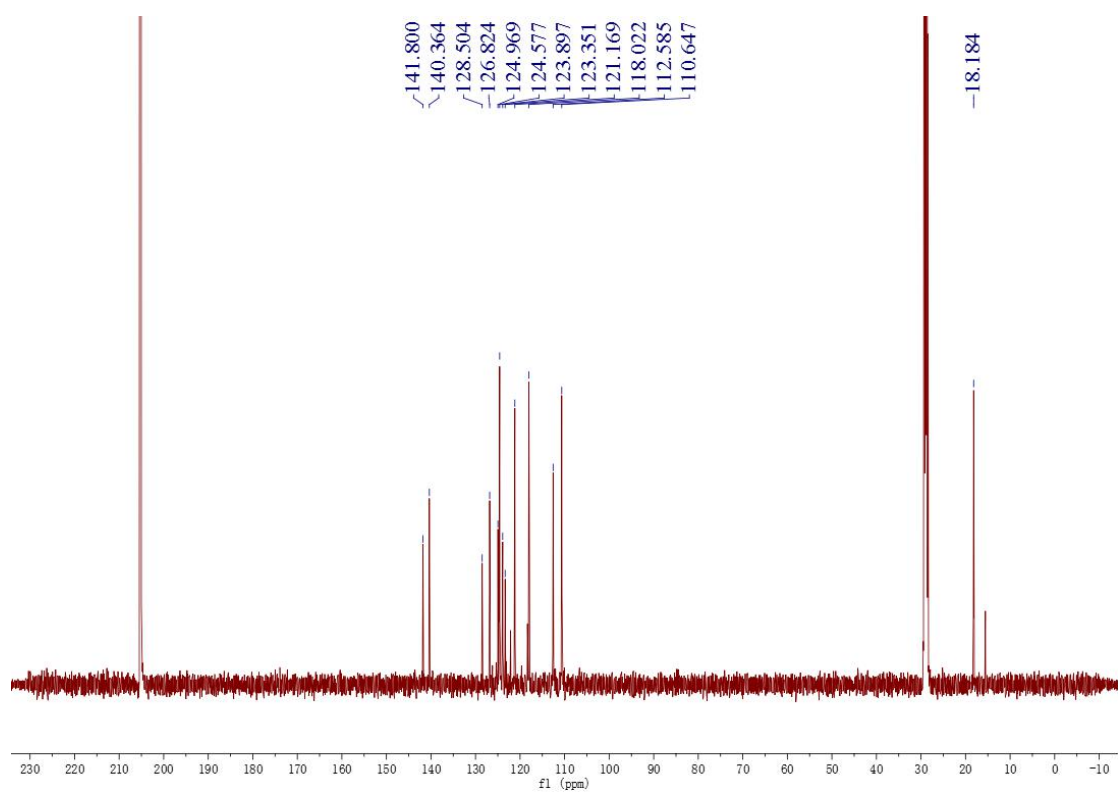


Figure S63 ^{13}C NMR spectrum (125 MHz, acetone- d_6) of compound **10**.

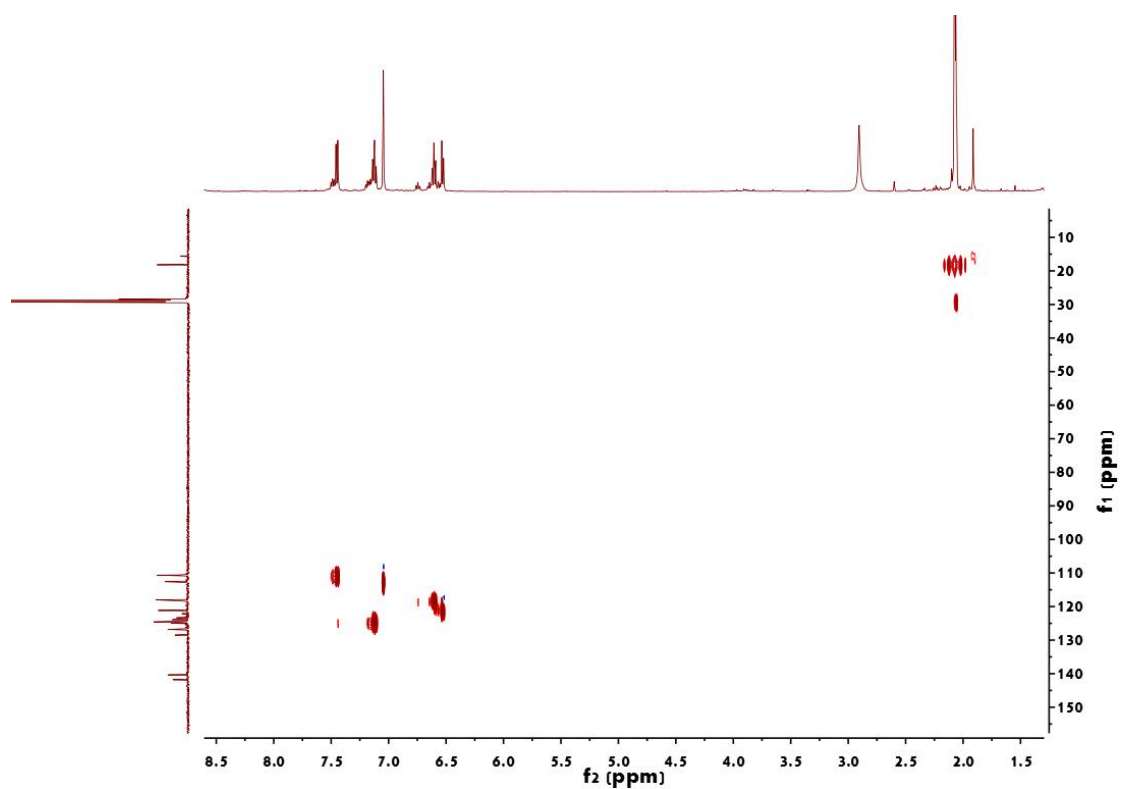


Figure S64 HSQC spectrum of compound **10**.

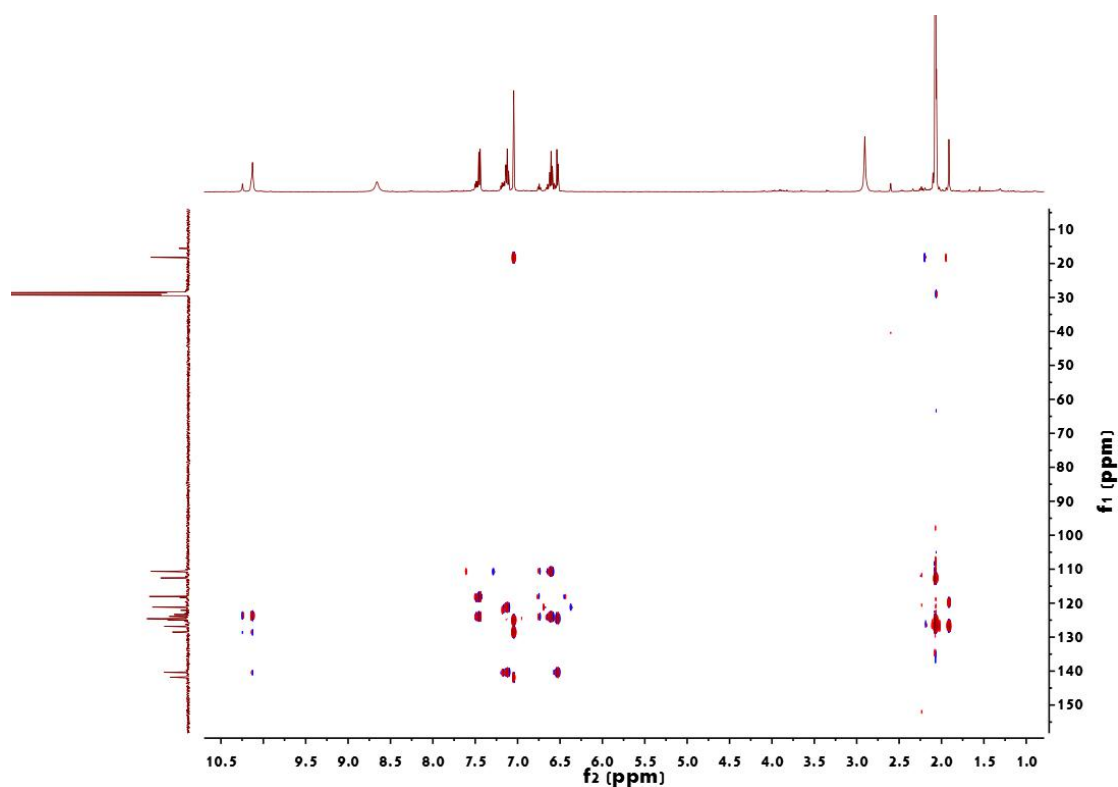


Figure S65 HMBC spectrum of compound **10**.

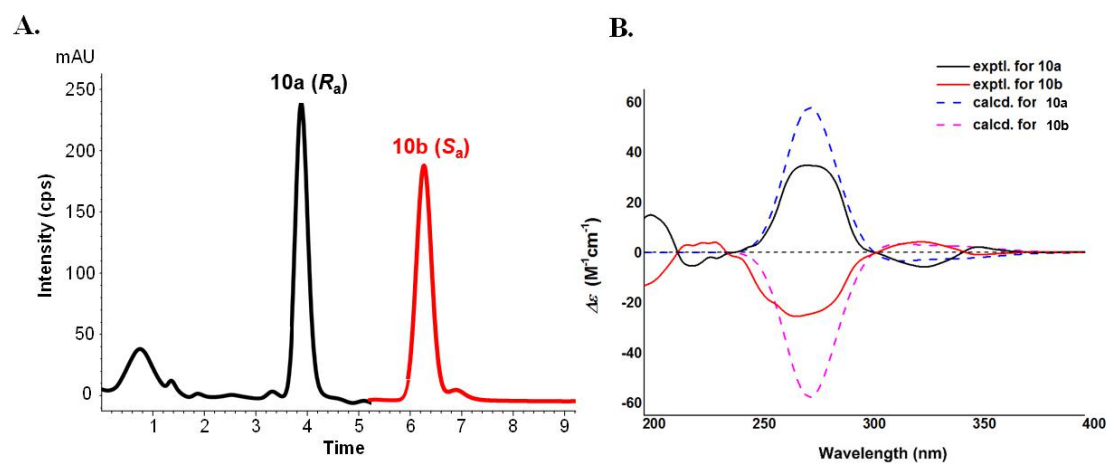


Figure S66 The chiral HPLC separation (A) and experimental and calculated ECD data (B) of compounds **10a** and **10b**.

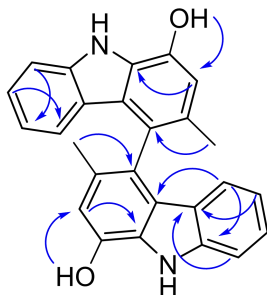


Figure S67 Key HMBC correlations of compounds **10**.

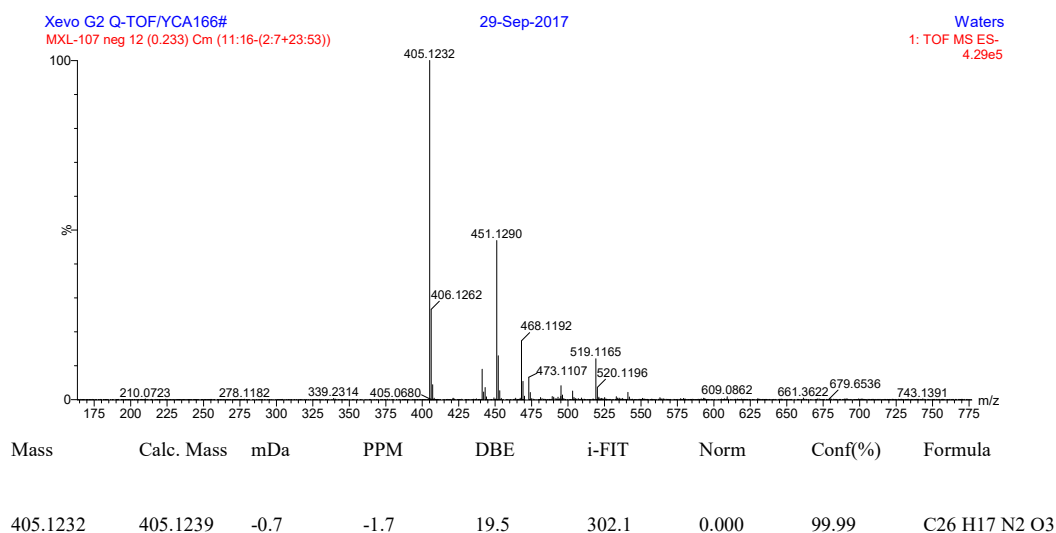


Figure S68 HRESIMS for compound **11**.

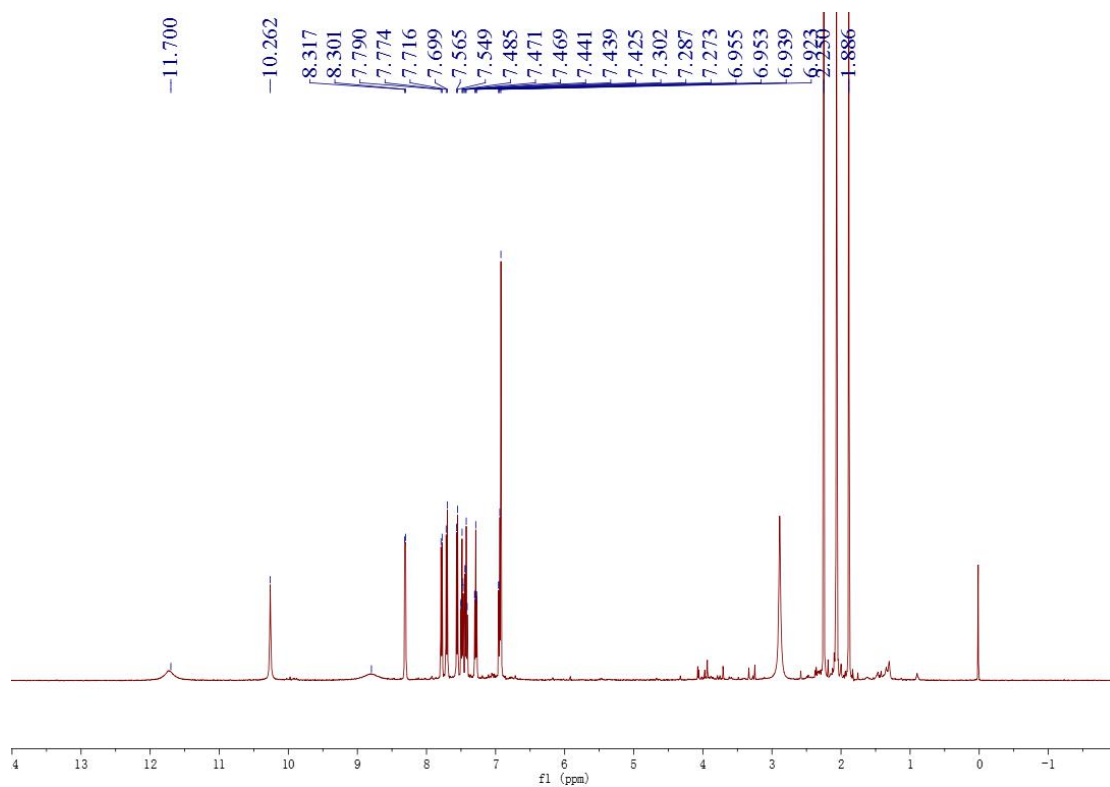


Figure S69 ¹H NMR spectrum (500 MHz, acetone-*d*₆) of compound **11**.

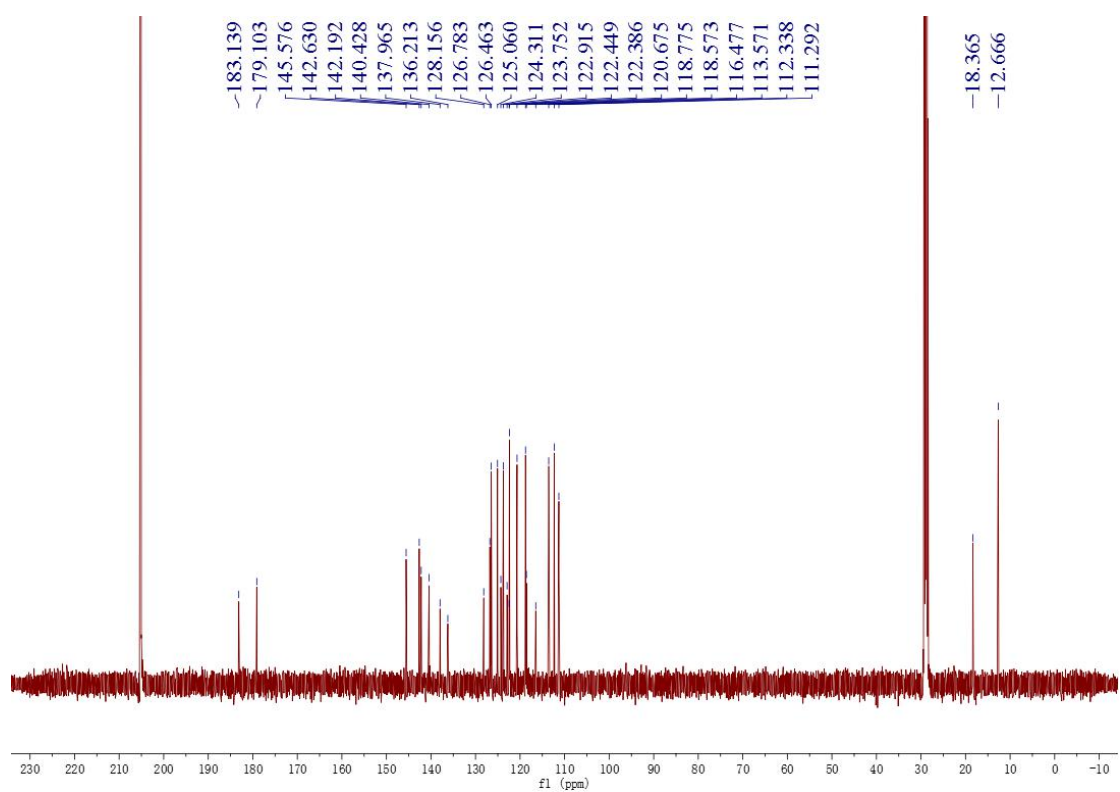


Figure S70 ^{13}C NMR spectrum (125 MHz, acetone- d_6) of compound **11**.

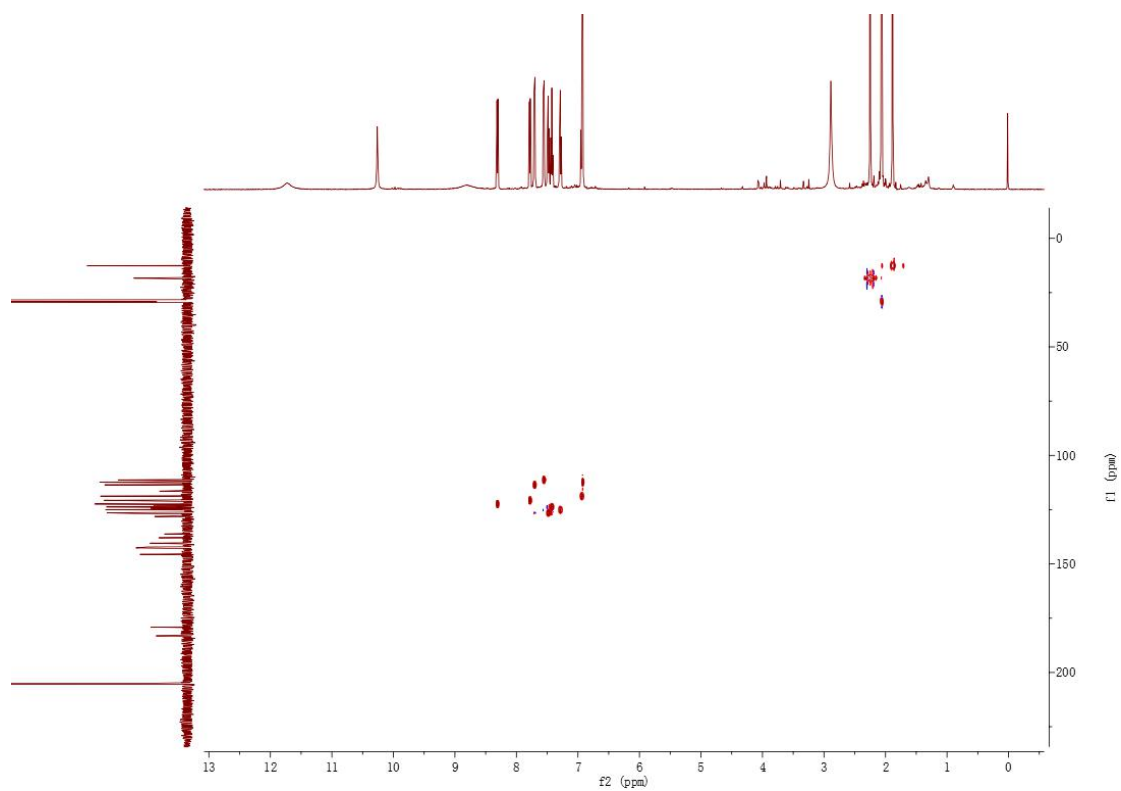


Figure S71 HSQC spectrum of compound **11**.

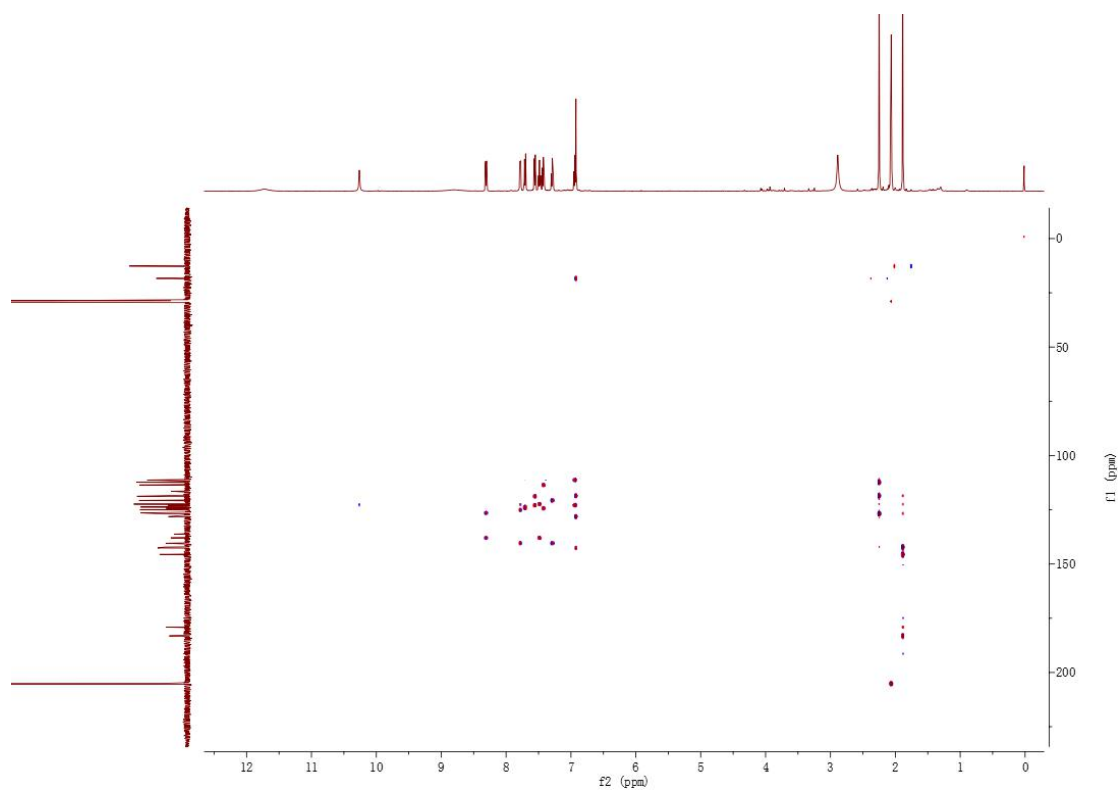


Figure S72 HMBC spectrum of compound **11**.

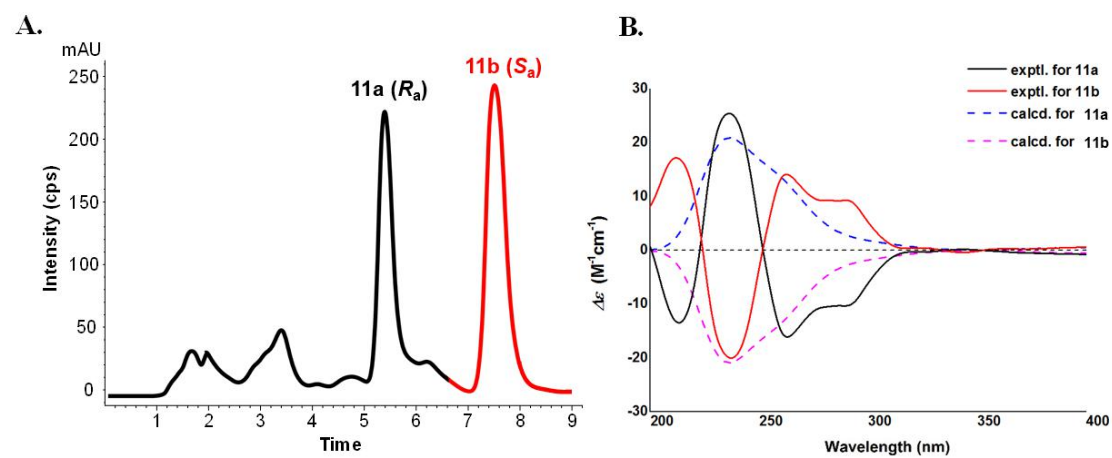


Figure S73 The chiral HPLC separation (A) and experimental and calculated ECD data (B) of compounds **11a** and **11b**.

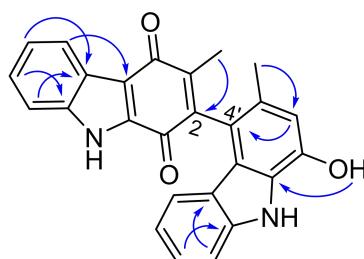


Figure S74 Key HMBC correlations of compounds **11**.

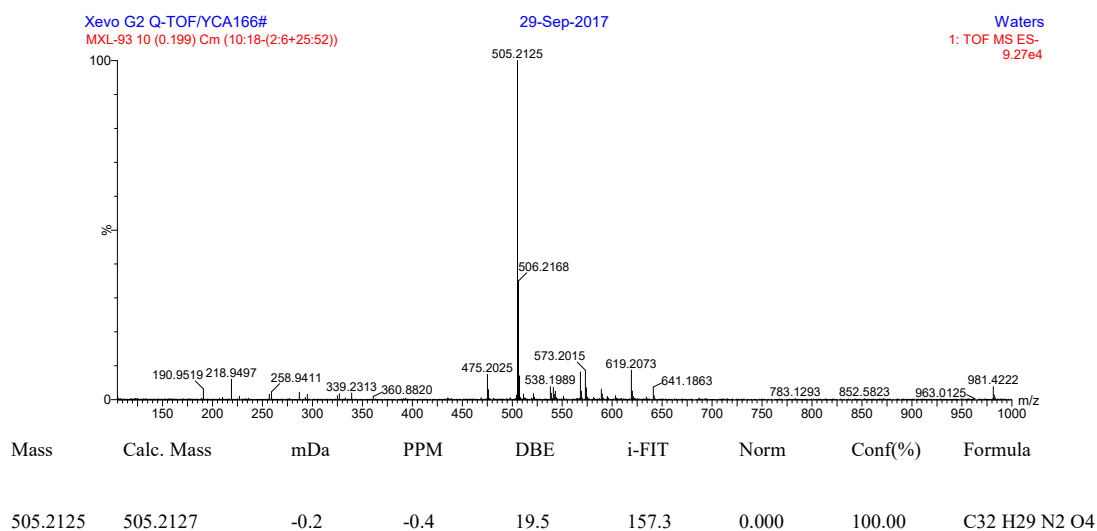


Figure S75 HRESIMS for compound **12**.

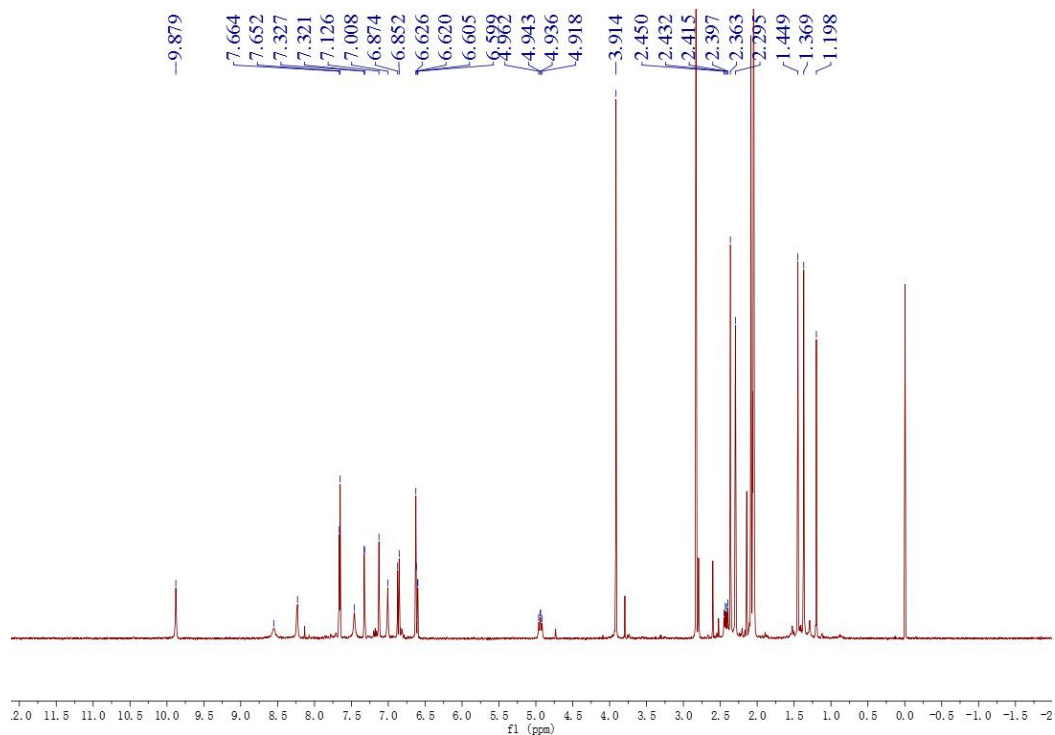


Figure S76 ^1H NMR spectrum (400 MHz, acetone- d_6) of compound **12**.

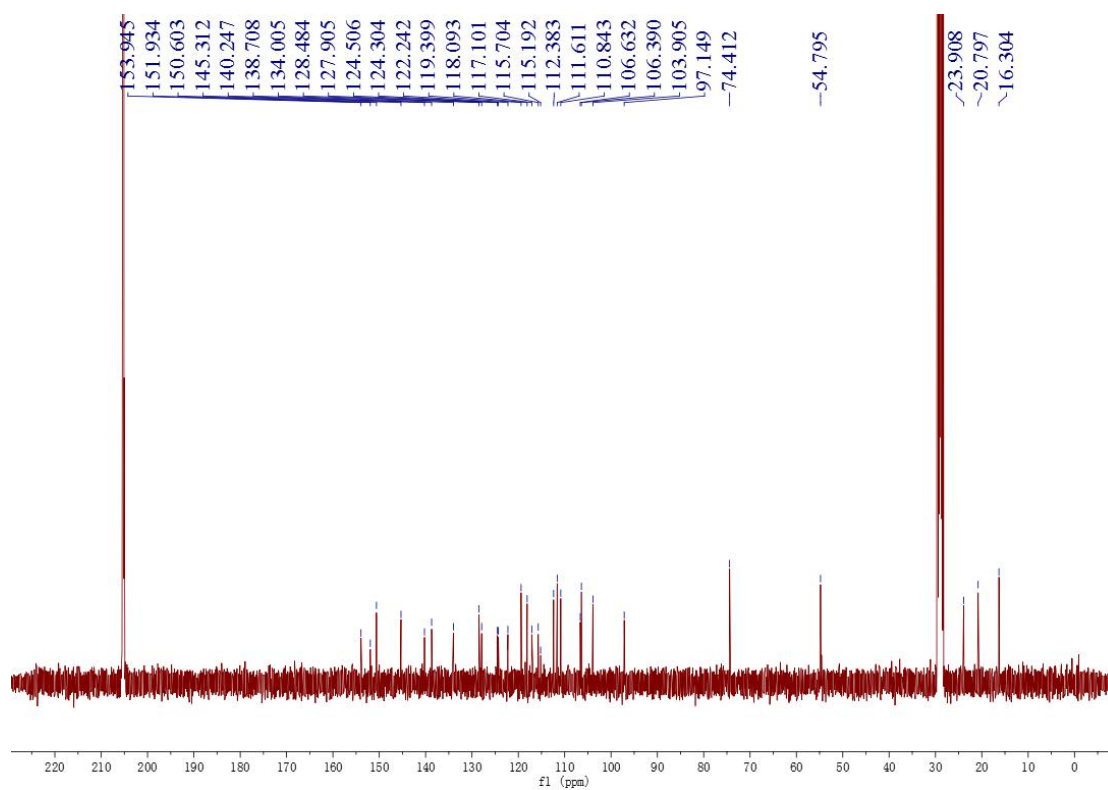


Figure S77 ^{13}C NMR spectrum (100 MHz, acetone- d_6) of compound **12**.

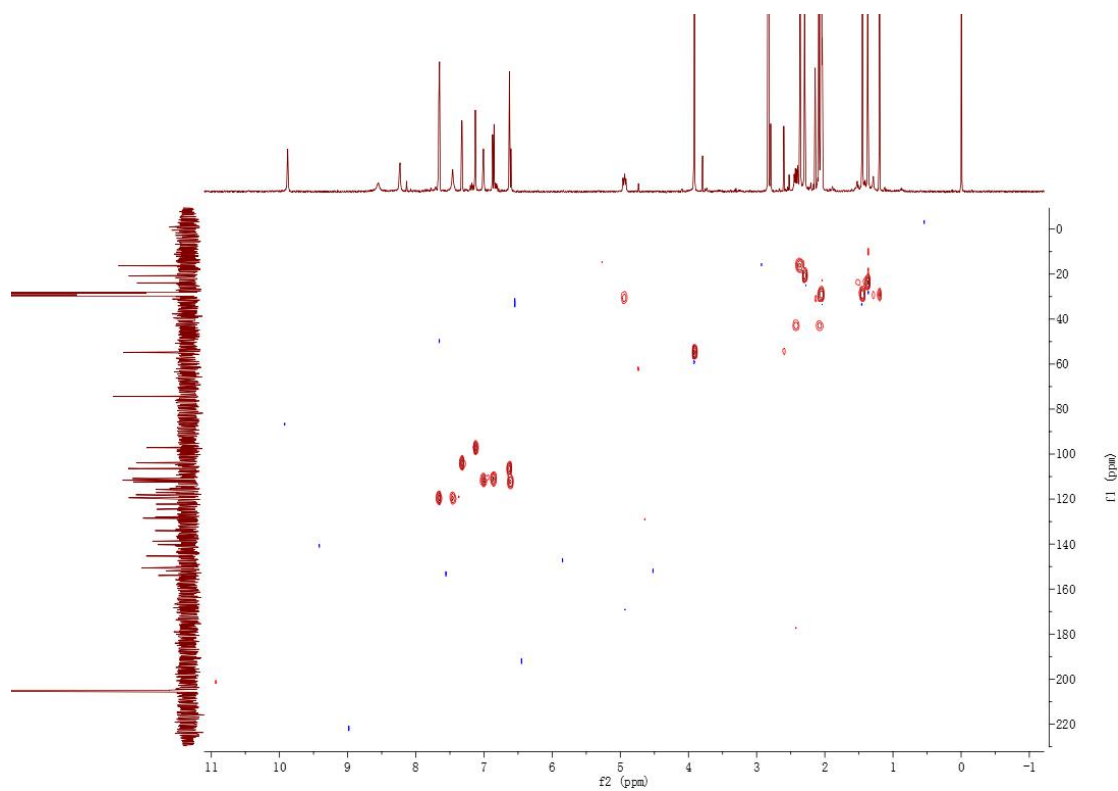


Figure S78 HSQC spectrum of compound **12**.

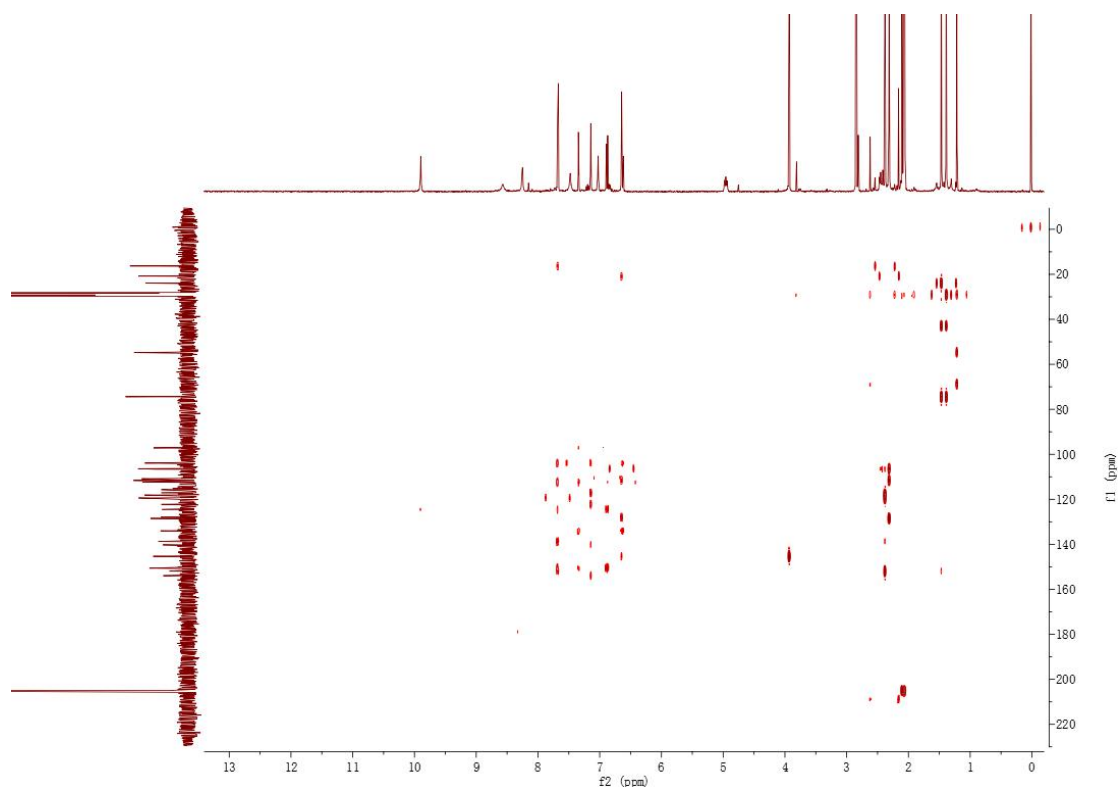


Figure S79 HMBC spectrum of compound **12**.

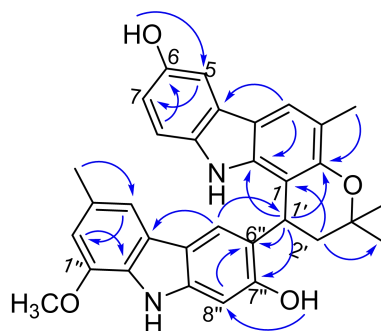


Figure S80 Key HMBC correlations of compounds **12**.

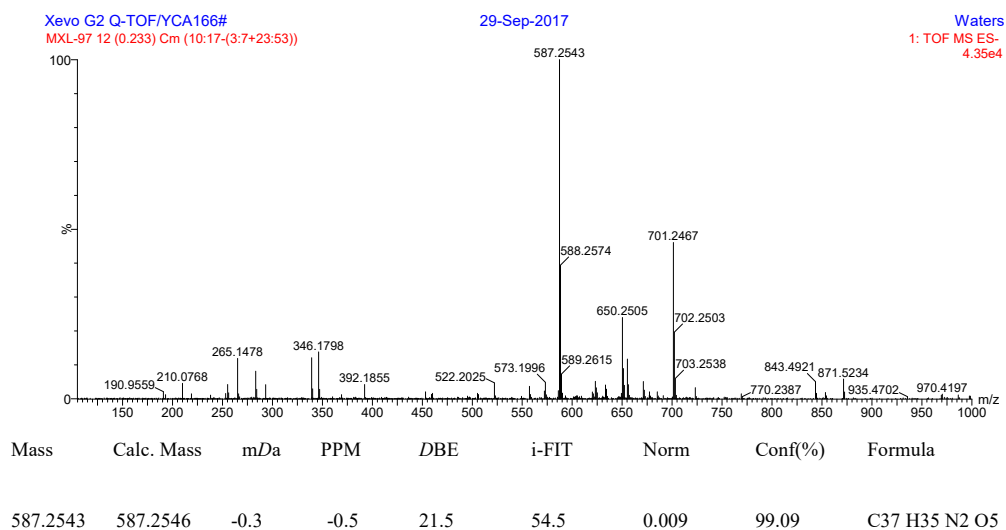


Figure S81 HRESIMS for compound **13**.

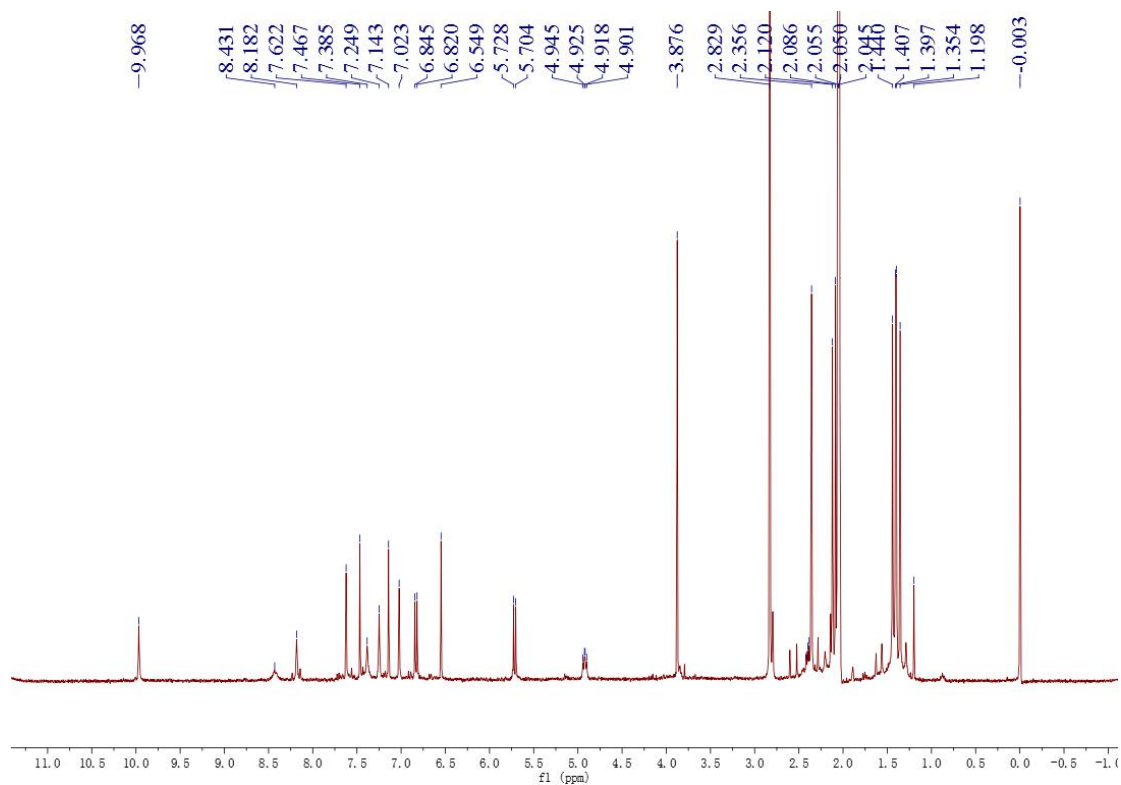


Figure S82 ^1H NMR spectrum (400 MHz, acetone- d_6) of compound **13**.

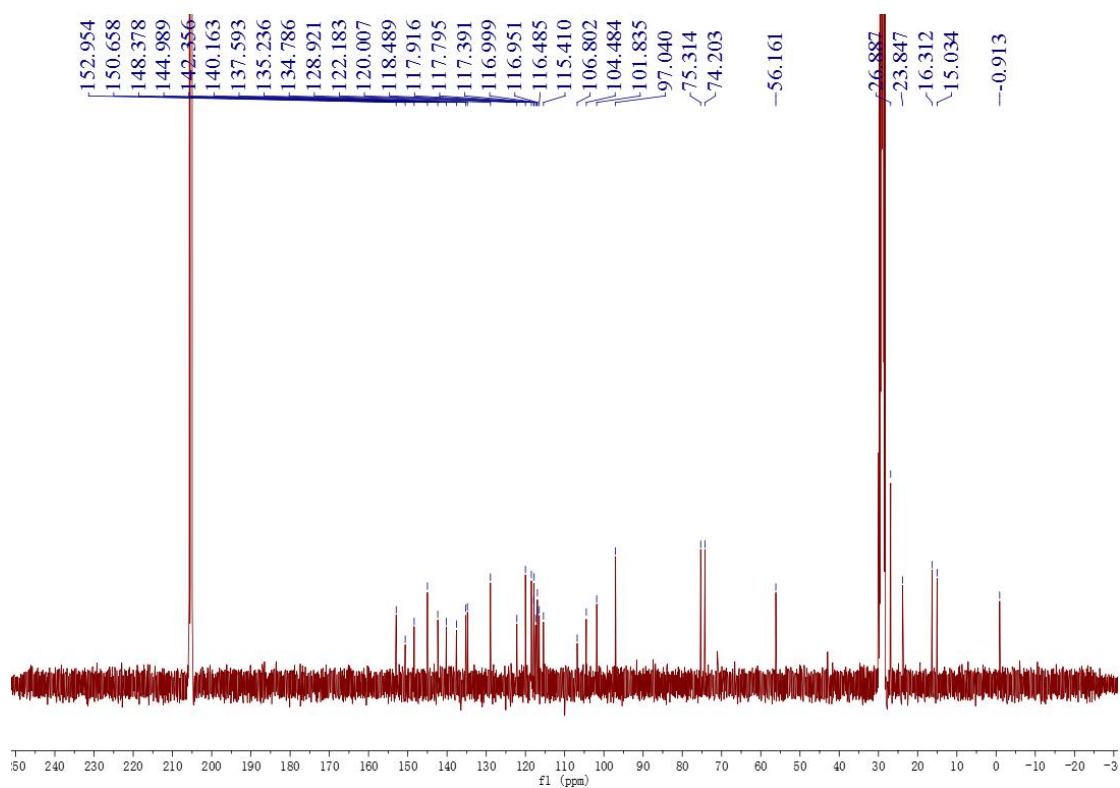


Figure S83 ^{13}C NMR spectrum (100 MHz, acetone- d_6) of compound **13**.

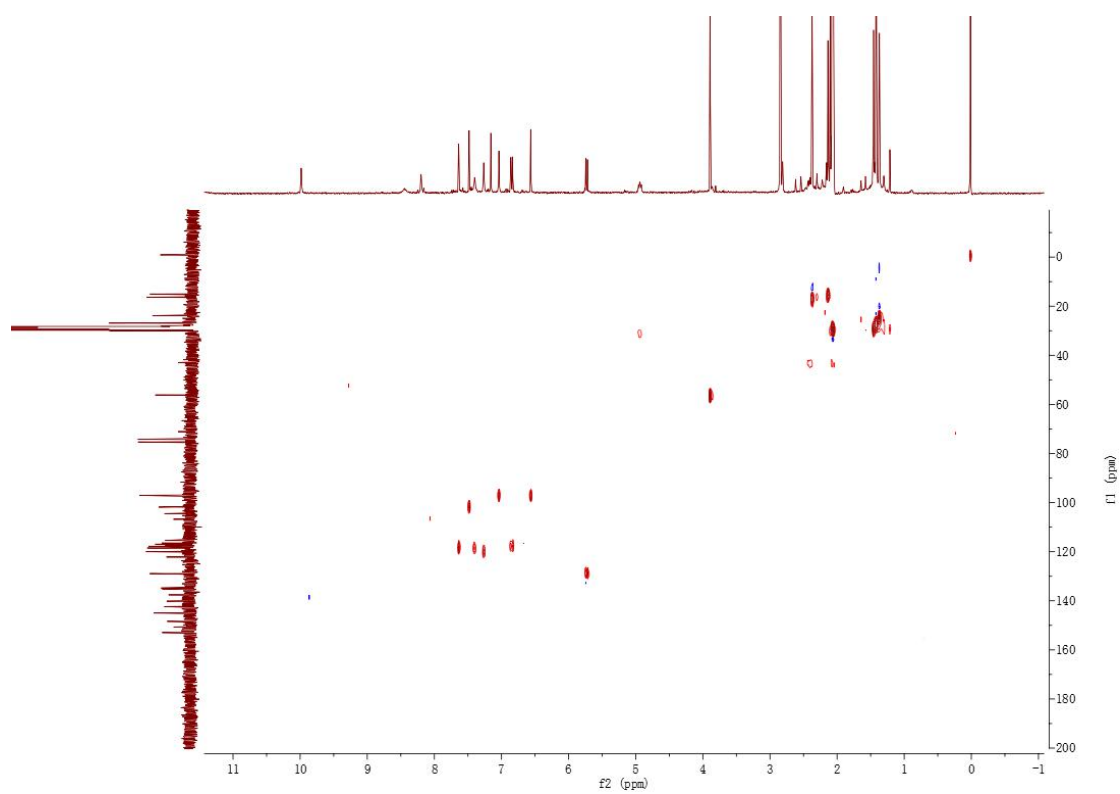


Figure S84 HSQC spectrum of compound **13**.

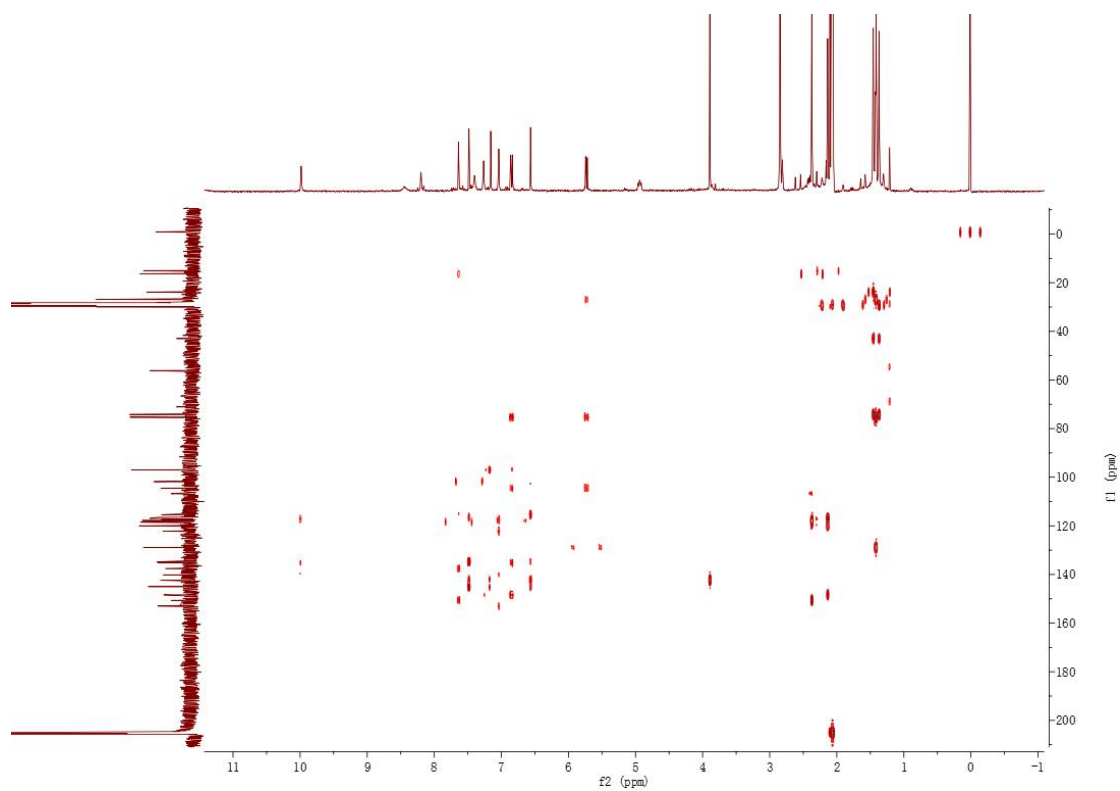


Figure S85 HMBC spectrum of compound **13**.

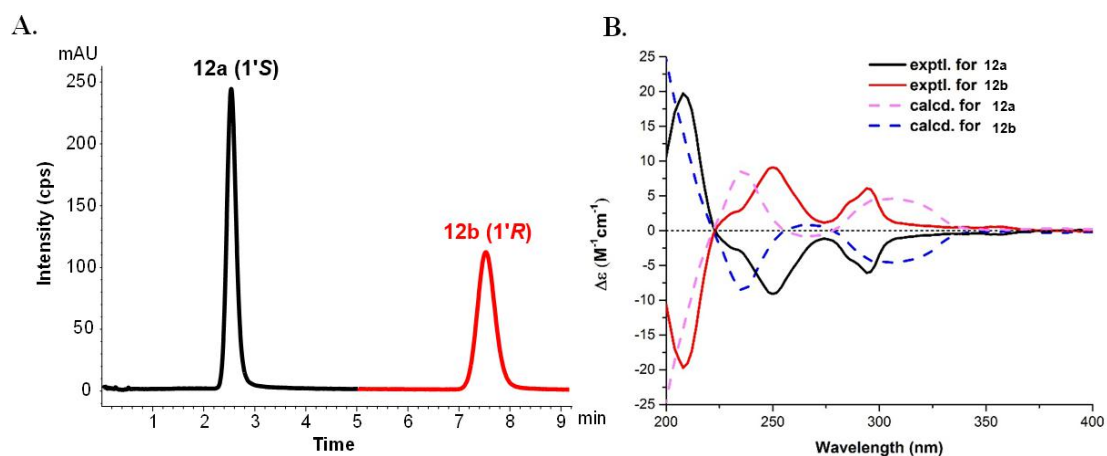


Figure S86 The chiral HPLC separation (A) and experimental and calculated ECD data (B) of compounds **13a** and **13b**.

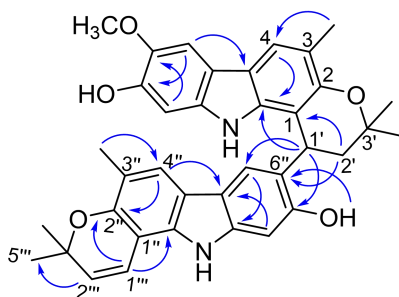


Figure S87 Key HMBC correlations of compounds **13**.

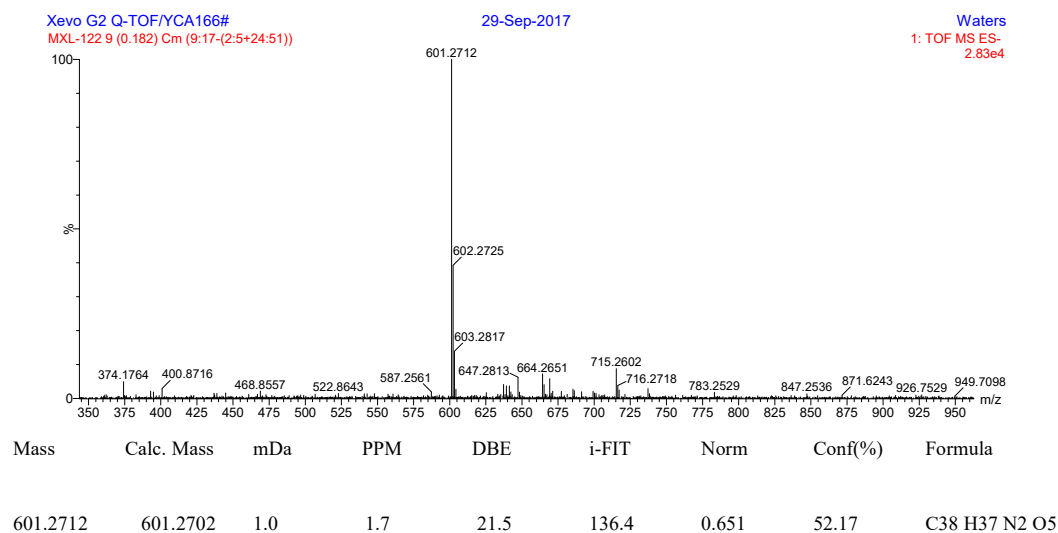


Figure S88 HRESIMS for compound **14**.

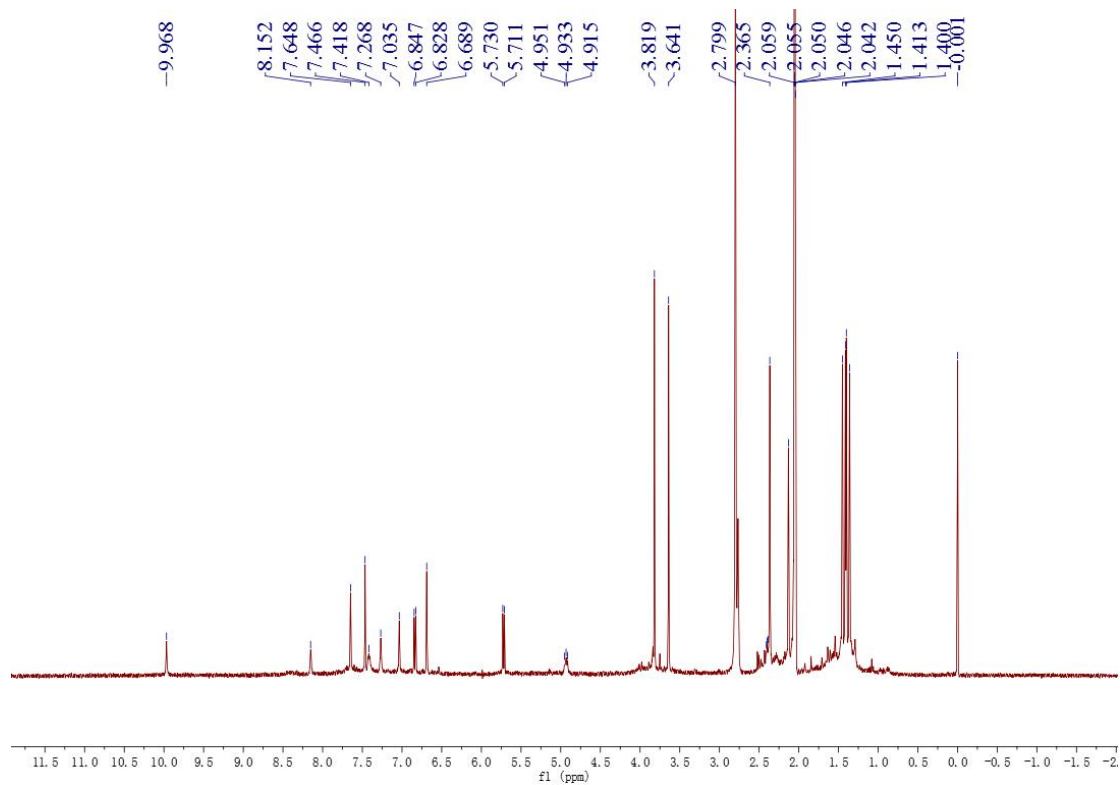


Figure S89 ¹H NMR spectrum (500 MHz, acetone-*d*₆) of compound 14.

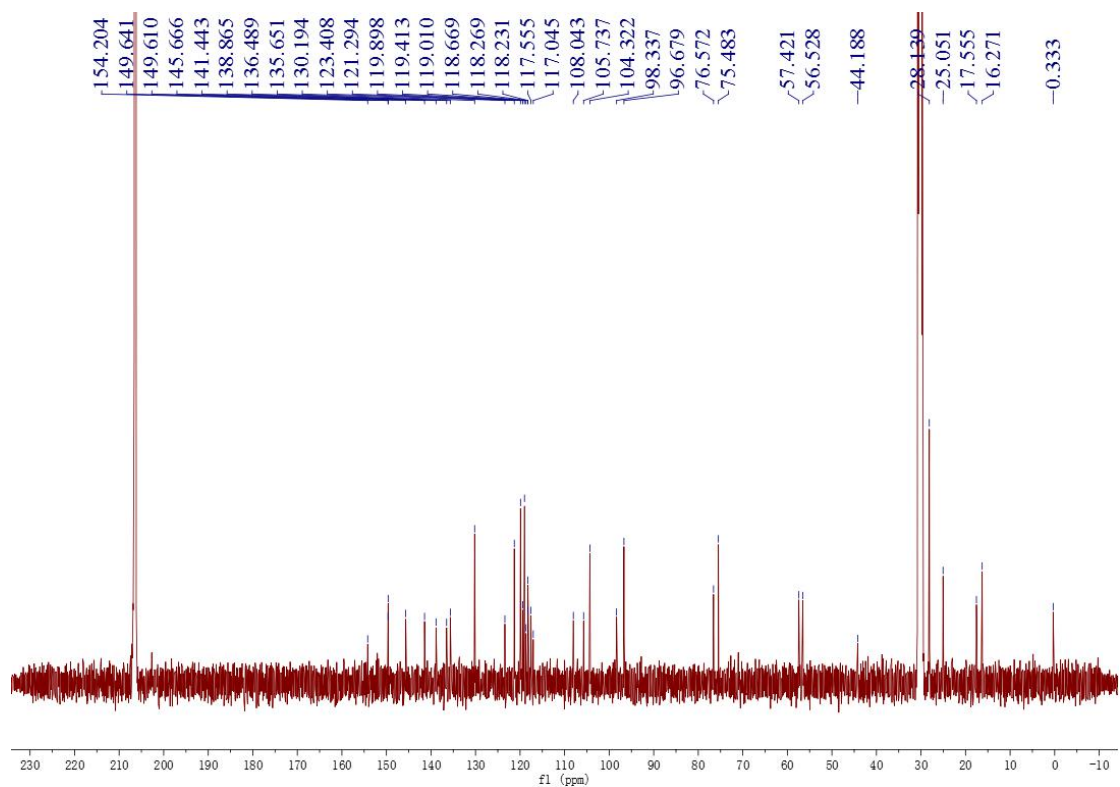


Figure S90 ¹³C NMR spectrum (125 MHz, acetone-*d*₆) of compound 14.

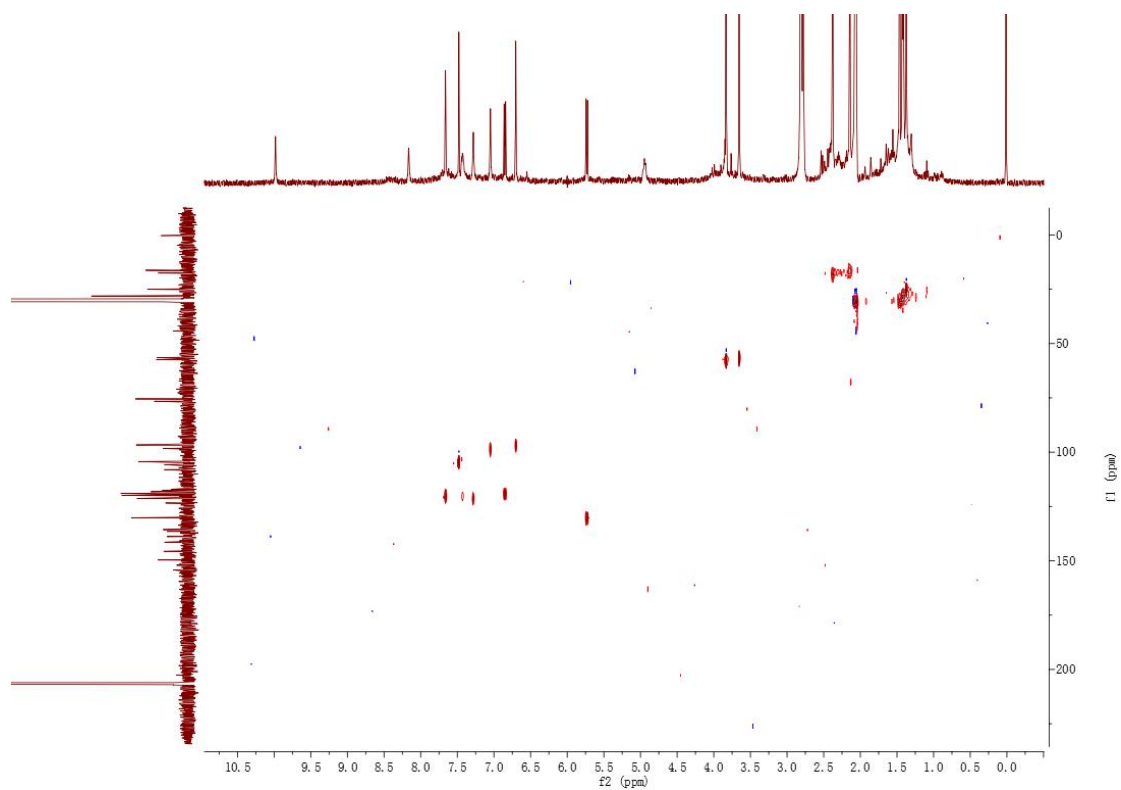


Figure S91 HSQC spectrum of compound **14**.

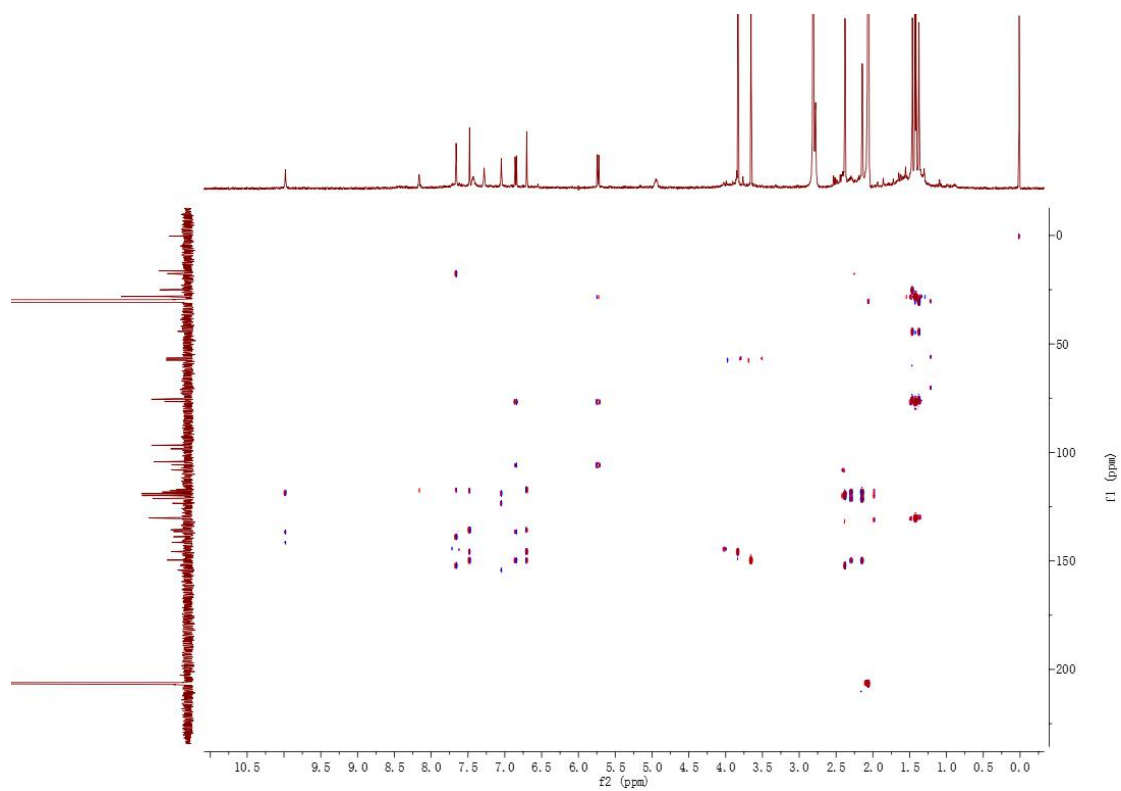


Figure S92 HMBC spectrum of compound **14**.

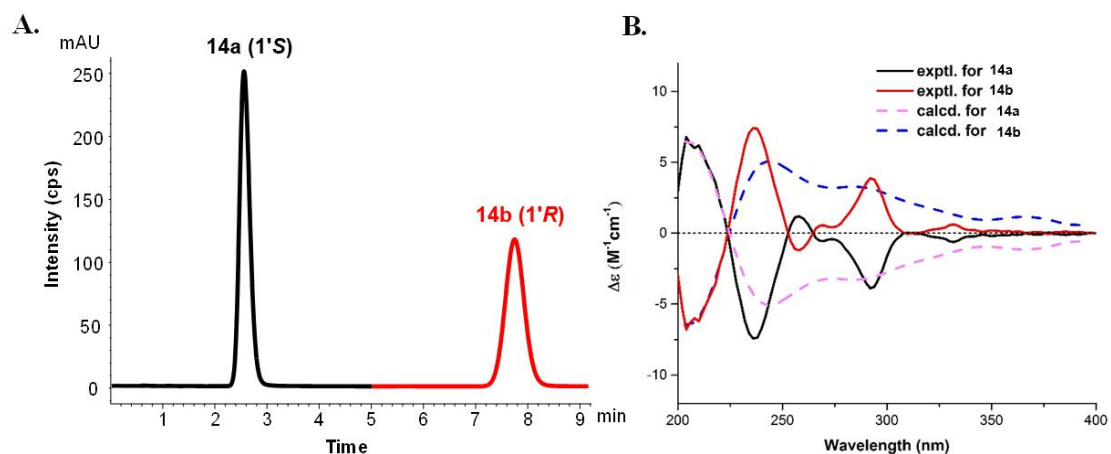


Figure S93 The chiral HPLC separation (A) and experimental and calculated ECD data (B) of compounds **14a** and **14b**.

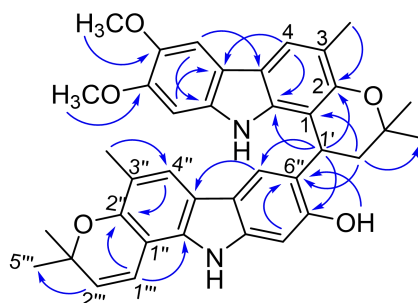


Figure S94 Key HMBC correlations of compounds **14**.

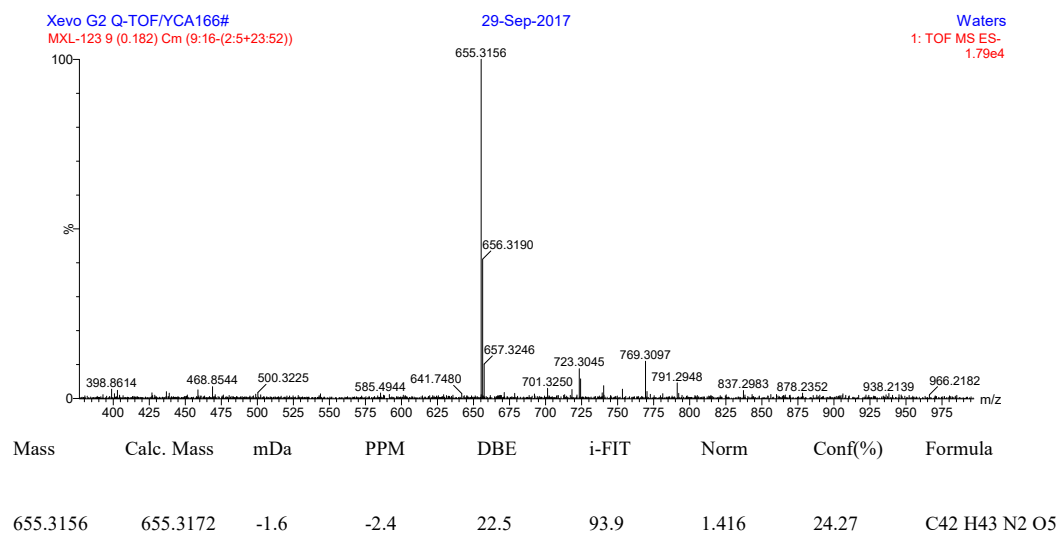


Figure S95 HRESIMS for compound **15**.

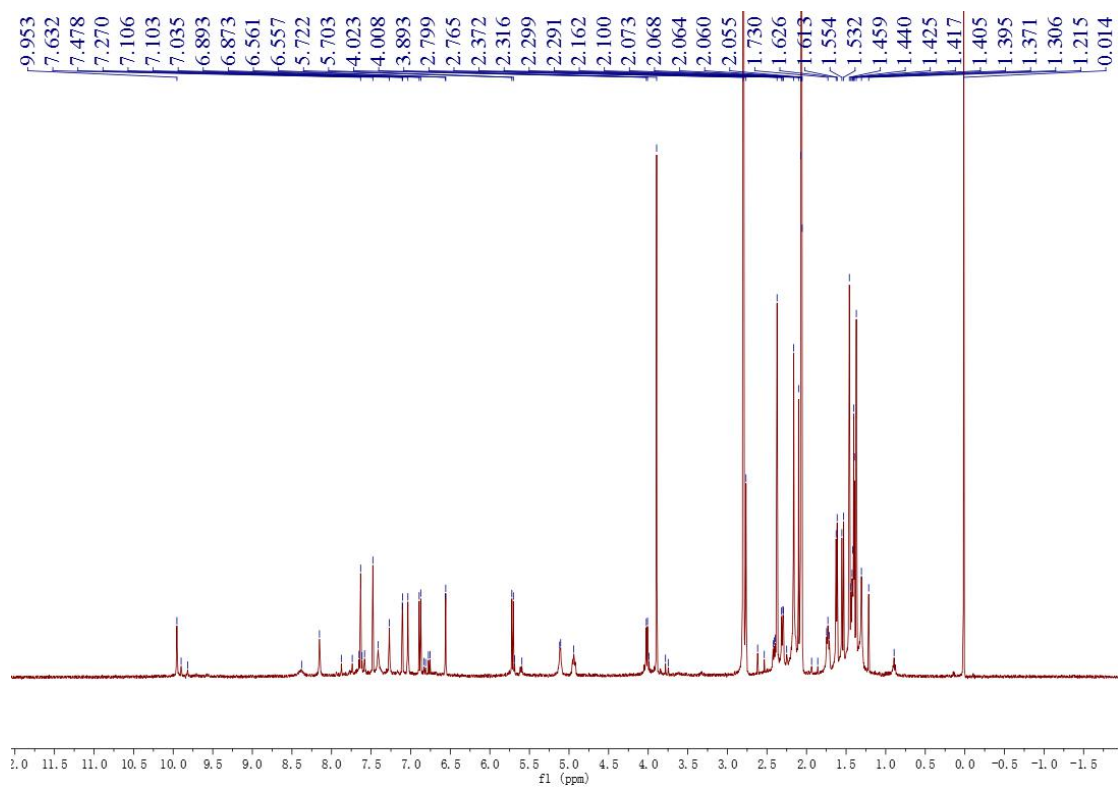


Figure S96 ¹H NMR spectrum (500 MHz, acetone-*d*₆) of compound 15.

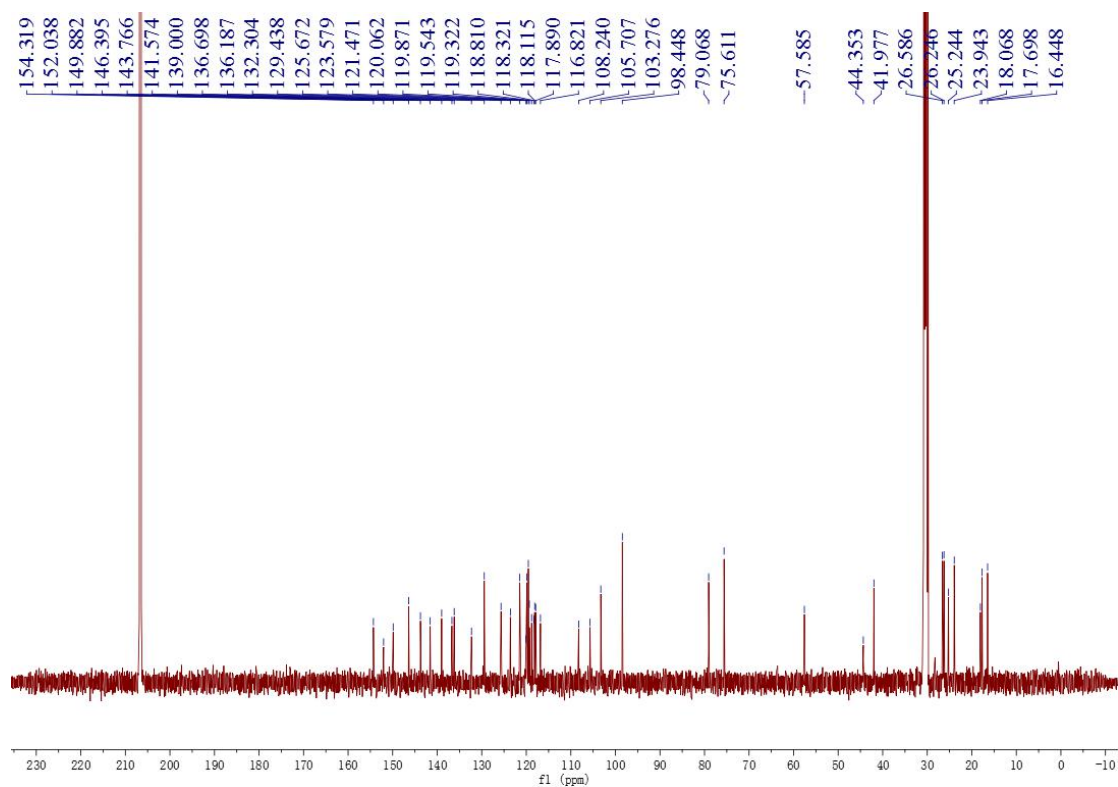


Figure S97 ¹³C NMR spectrum (125 MHz, acetone-*d*₆) of compound 15.

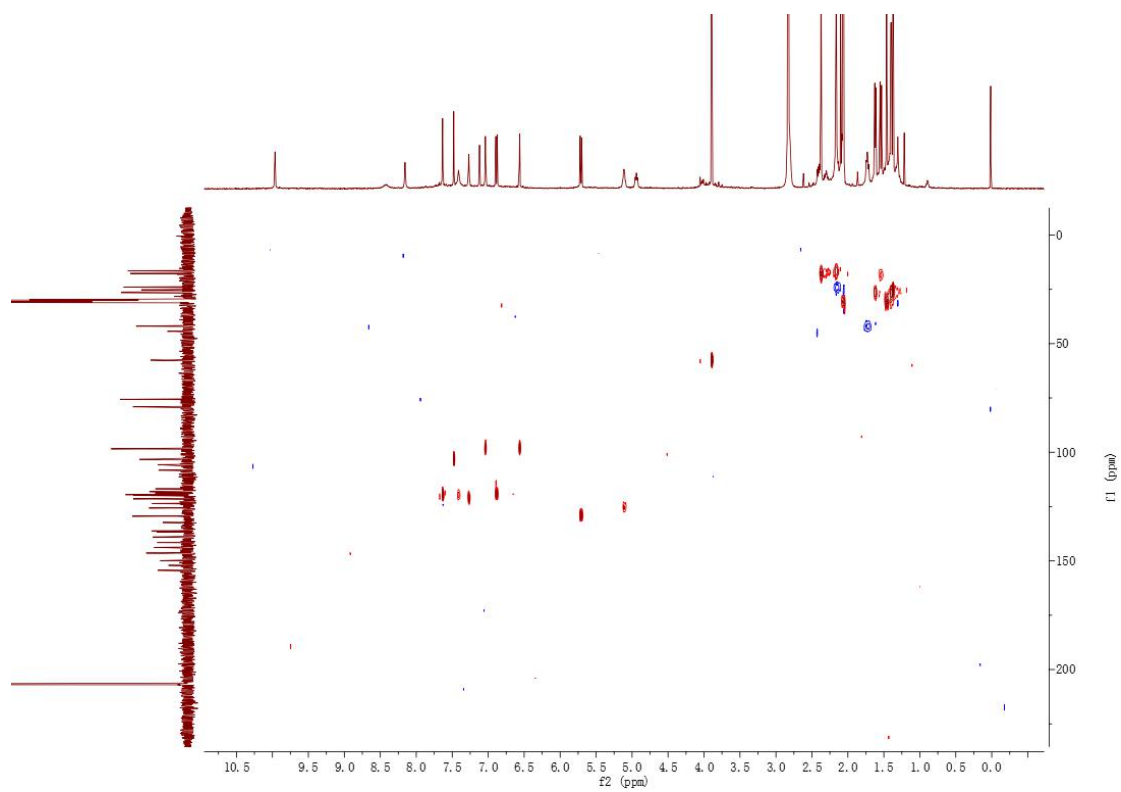


Figure S98 HSQC spectrum of compound **15**.

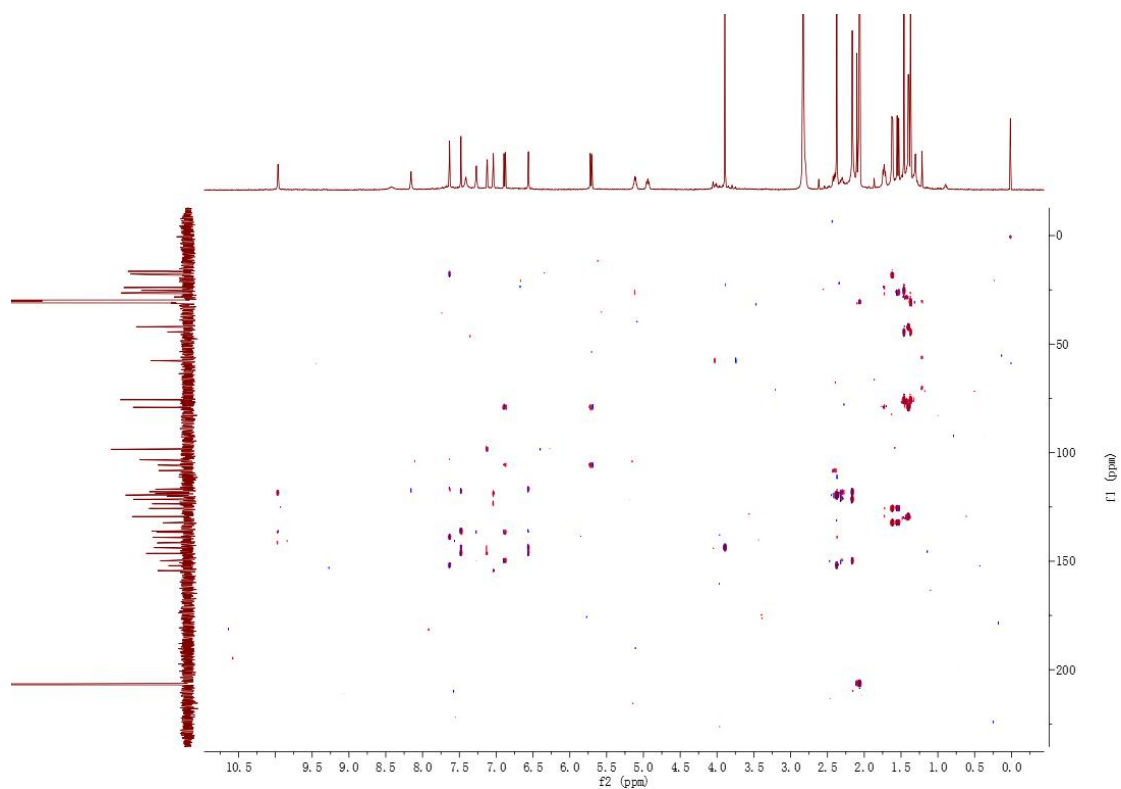


Figure S99 HMBC spectrum of compound **15**.

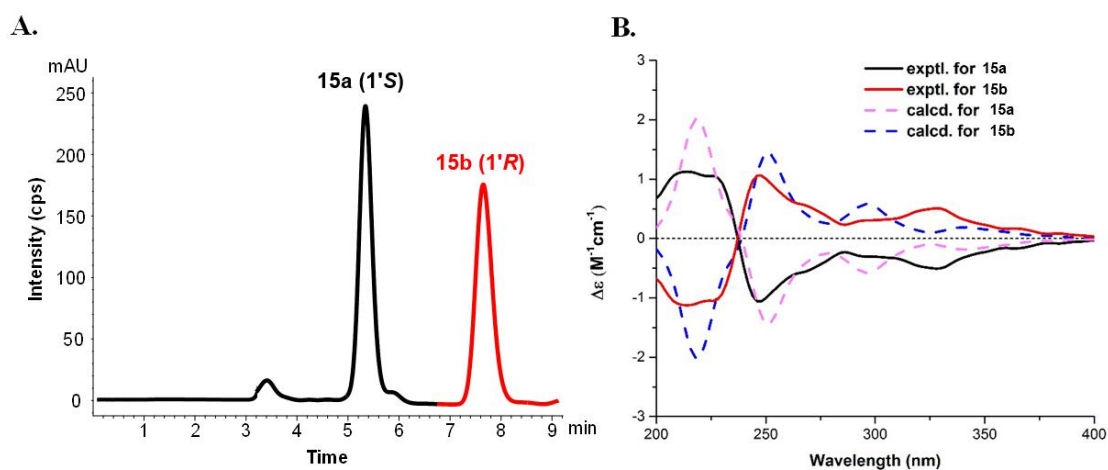


Figure S100 The chiral HPLC separation and experimental and calculated ECD data of compounds **15a** and **15b**.

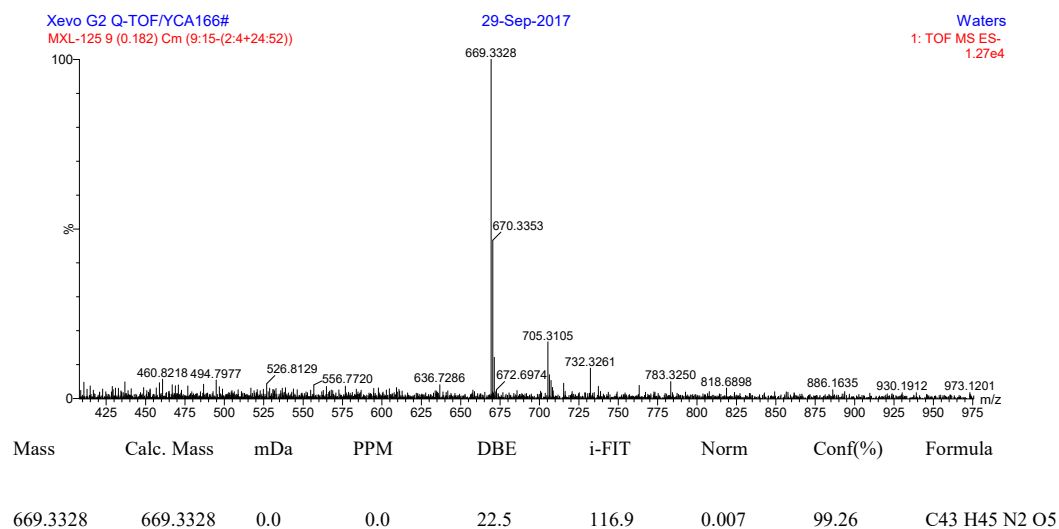


Figure S101 HRESIMS for compound **16**.

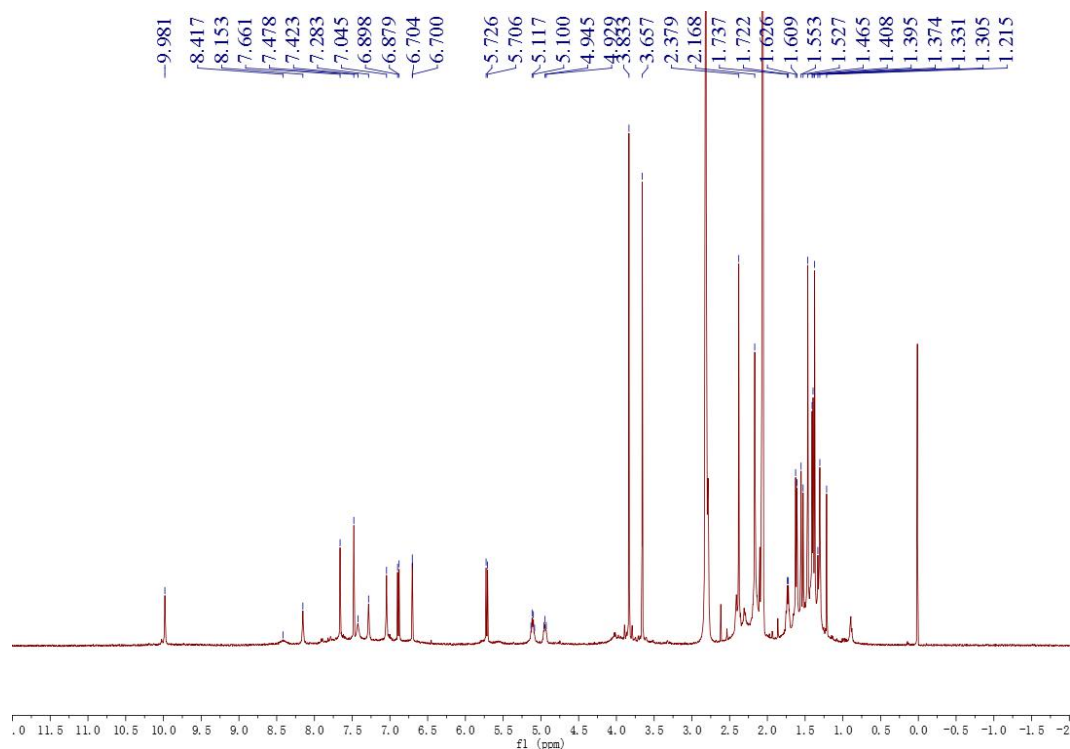


Figure S102 ¹H NMR spectrum (500 MHz, acetone-*d*₆) of compound 16.

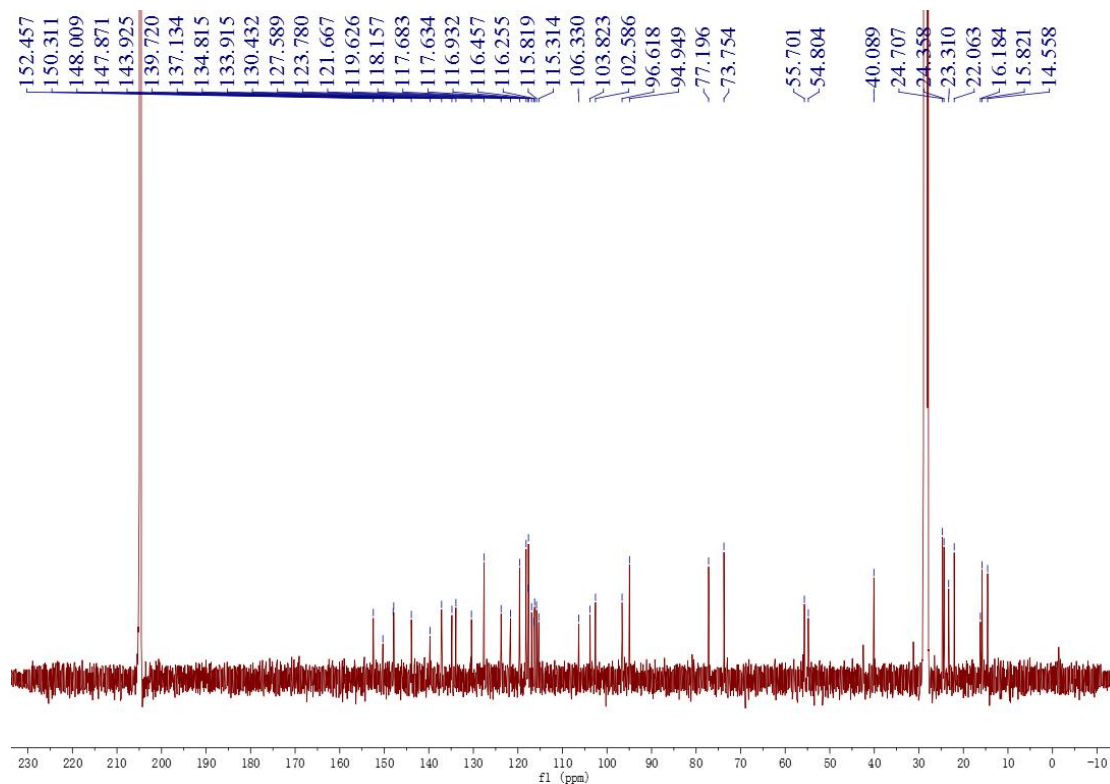


Figure S103 ¹³C NMR spectrum (125 MHz, acetone-*d*₆) of compound 16.

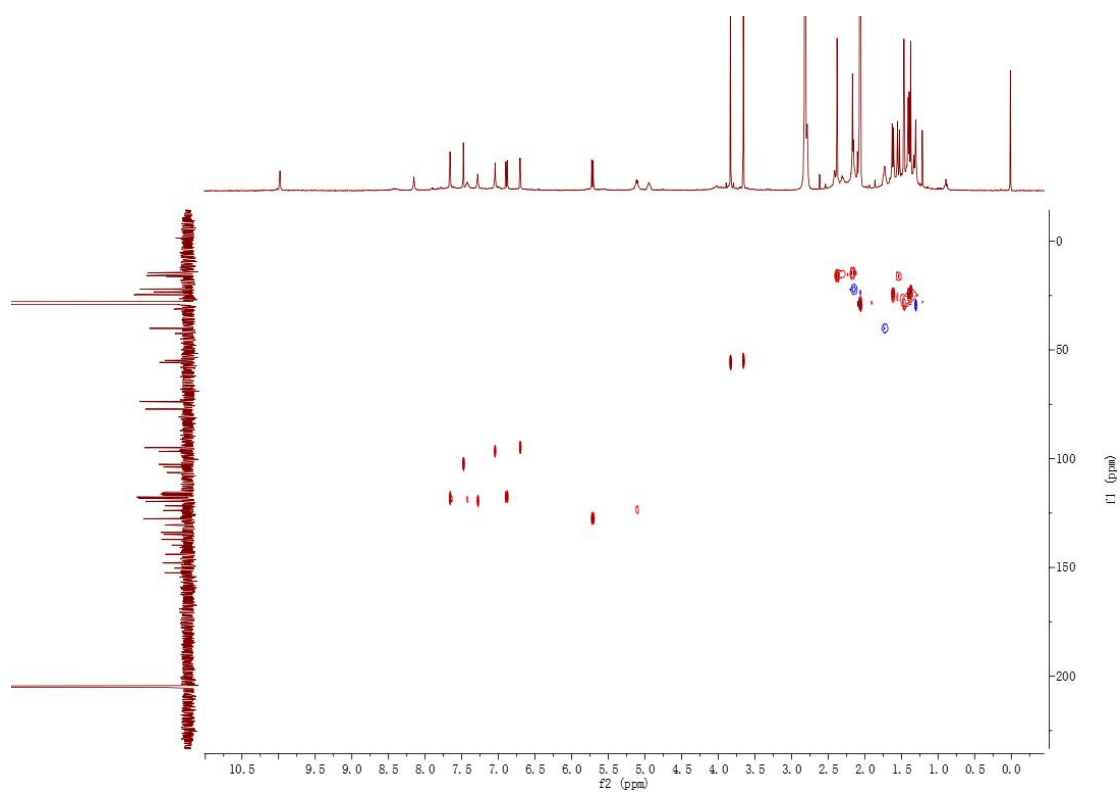


Figure S104 HSQC spectrum of compound 16.

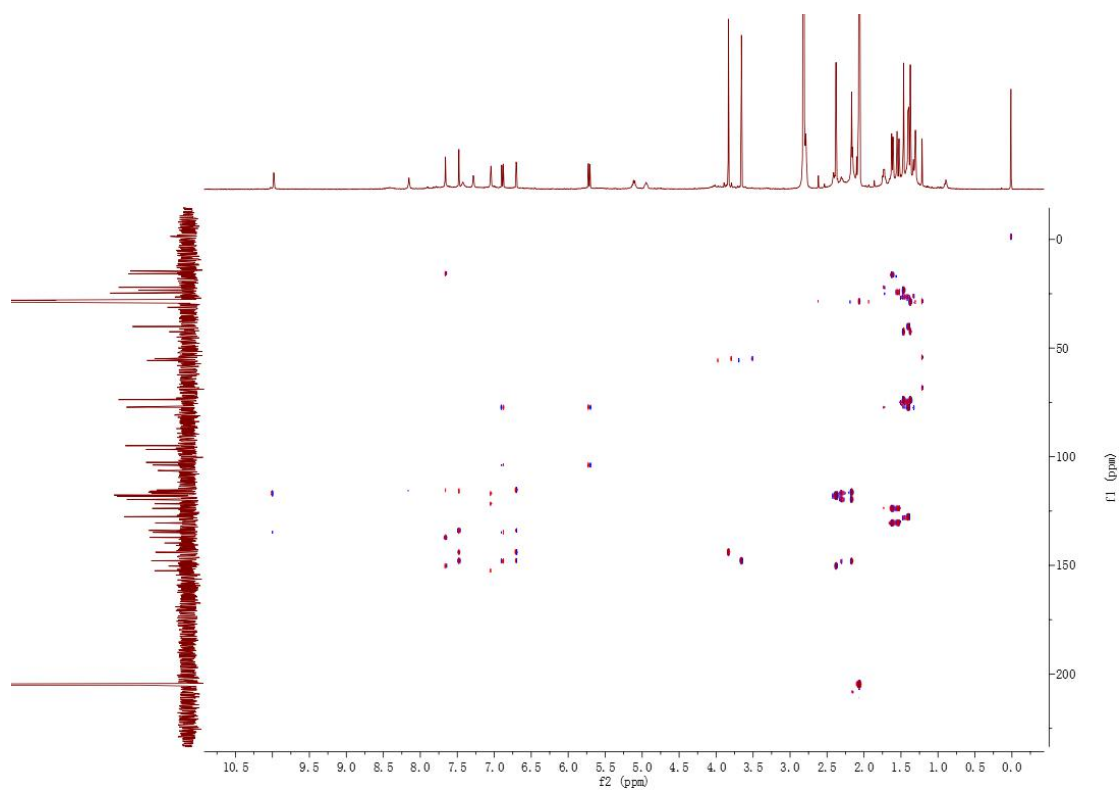


Figure S105 HMBC spectrum of compound 16.

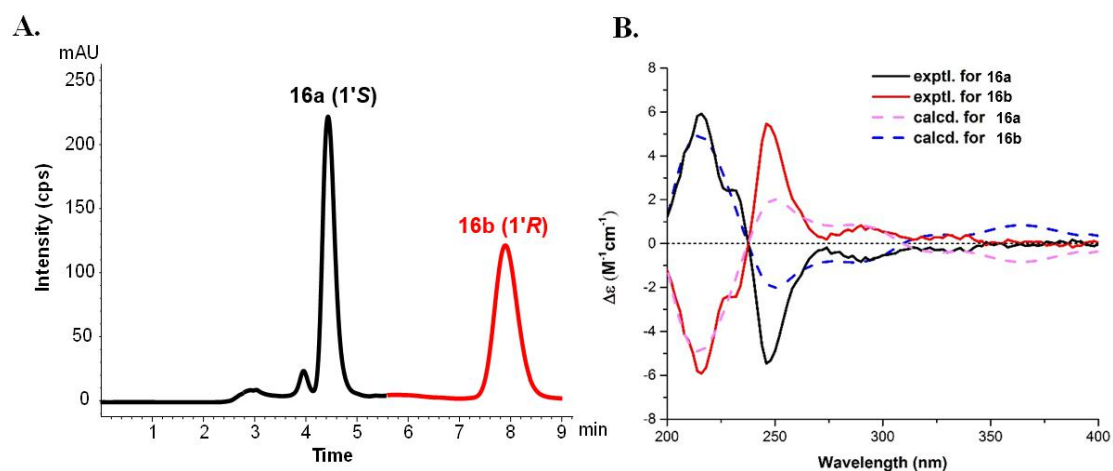


Figure S106 The chiral HPLC separation (A) and experimental and calculated ECD data (B) of compounds **16a** and **16b**.

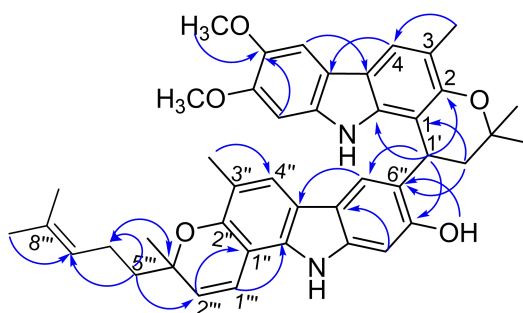


Figure S107 Key HMBC correlations of compounds **16**.

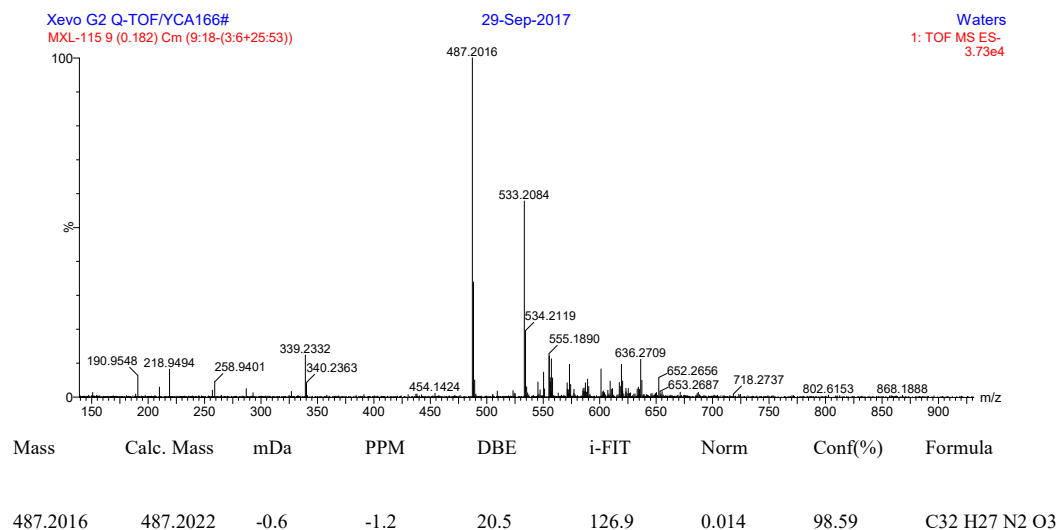


Figure S108 HRESIMS for compound **17**.

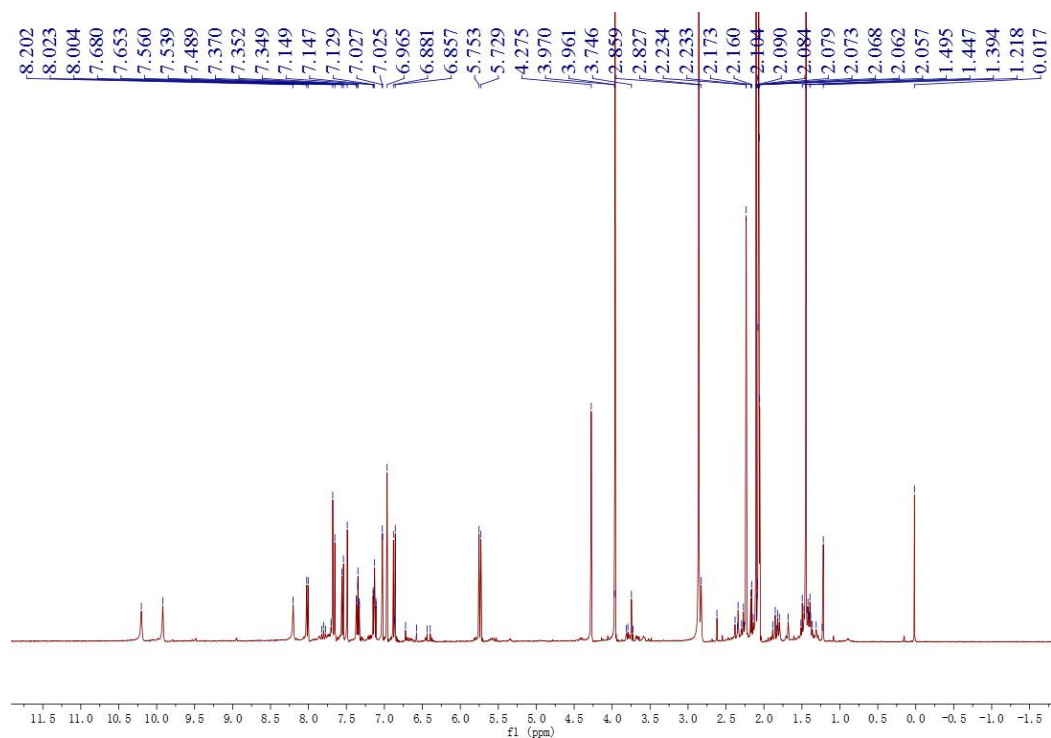


Figure S109 ^1H NMR spectrum (400 MHz, acetone- d_6) of compound **17**.

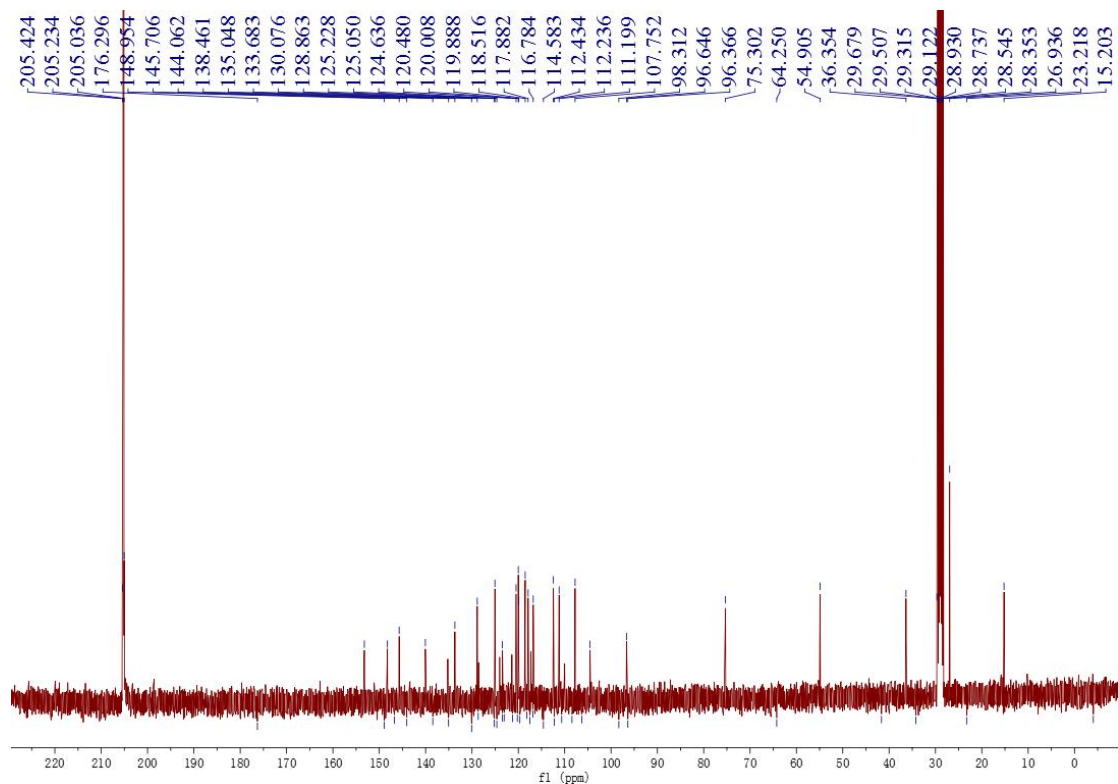


Figure S110 ^{13}C NMR spectrum (100 MHz, acetone- d_6) of compound **17**.

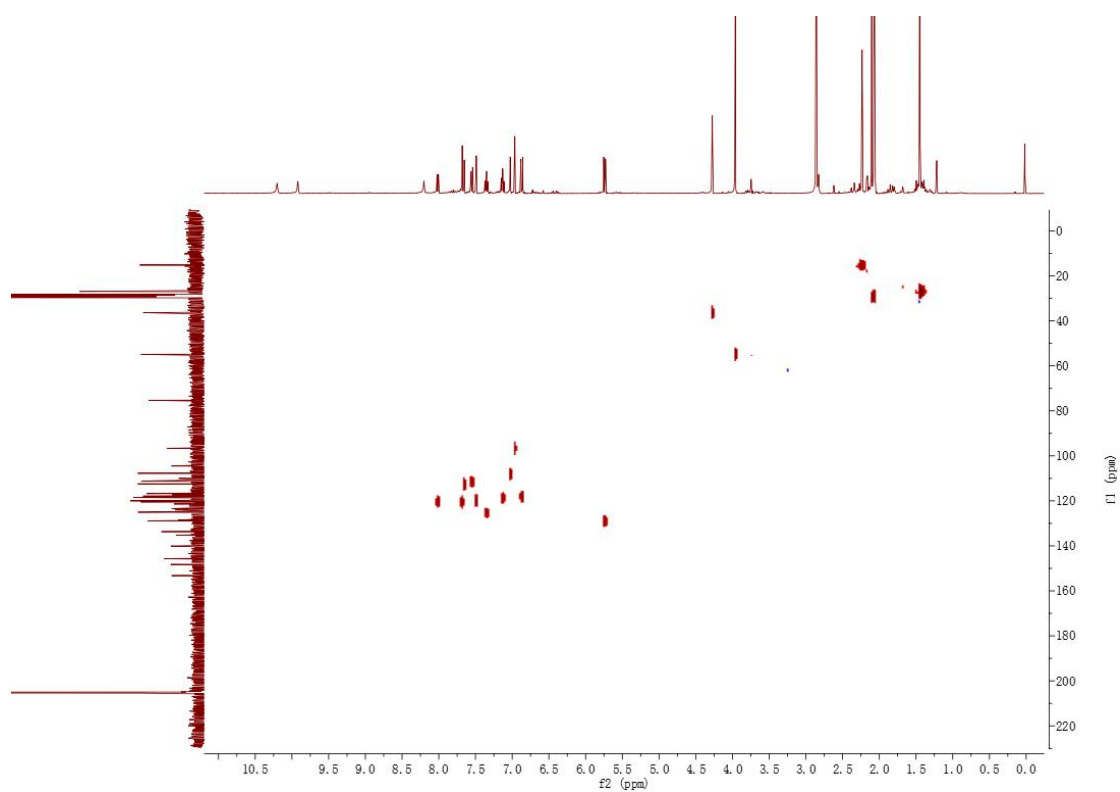


Figure S111 HSQC spectrum of compound 17.

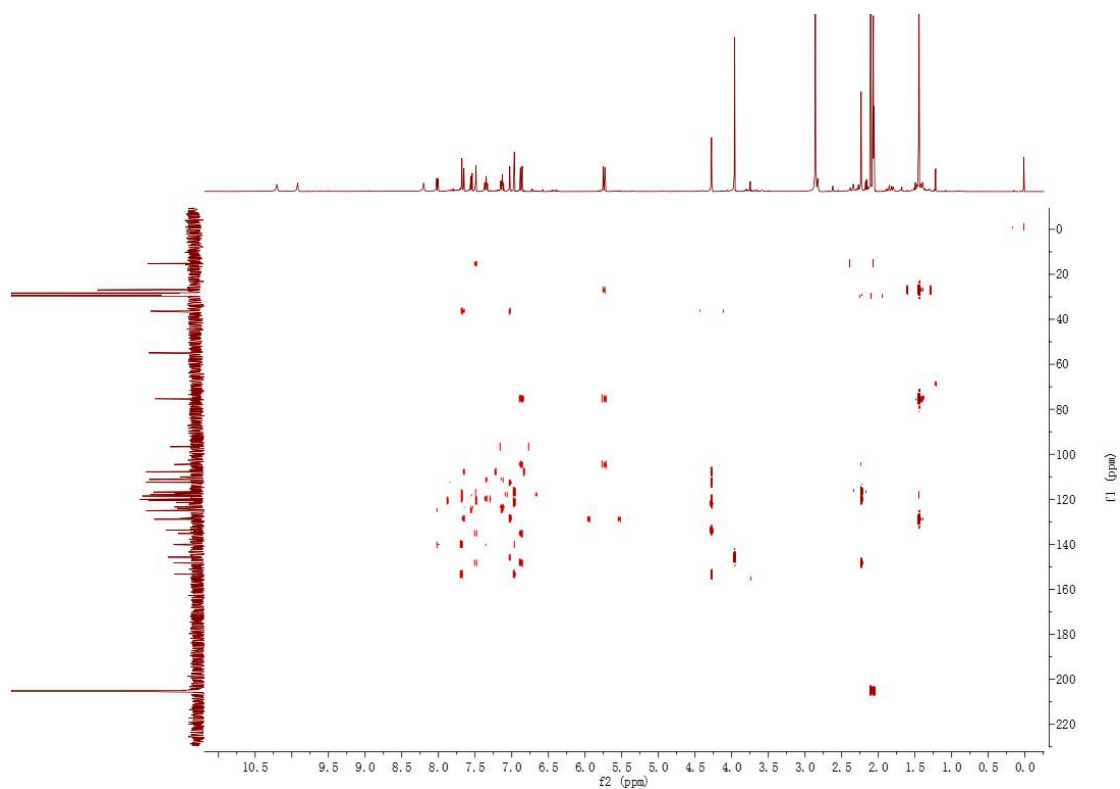


Figure S112 HMBC spectrum of compound 17.